

MACDONALD COLLEGE JOURNAL

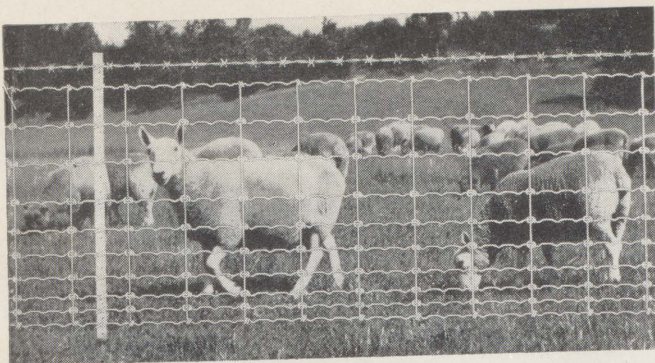


VOLUME 2
No. 7



MARCH
1942

Farm . Home . School



For Service and Appearance "SECURITY" FENCING

Made of real copper bearing steel wire in accordance with the American Society for Testing Materials Specification All6. When you specify "Security" you get the best fence for the particular job.



DOMINION STEEL & COAL CORP. LTD.
Security Fence Division

Canada Cement Bldg.

Montreal



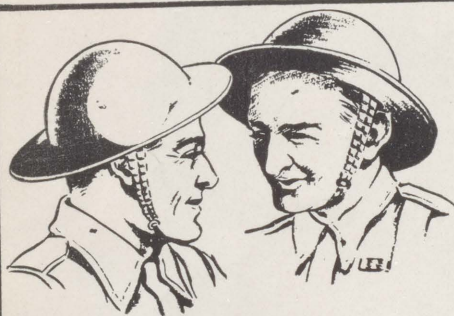
BORROWING to keep your farm in good working condition should be *profitable*; it is a *constructive* use of credit.

Our managers are familiar with the needs of farmers and they welcome applications for loans having a constructive purpose.

BANK OF MONTREAL

Established 1817

"a bank where small accounts are welcome"



"I hope they send more cigarettes!"

\$2.50 SENDS 1000

\$1.00 SENDS 300

British Consols
Cigarettes
OVERSEAS



**"Don't worry!
I'll send the best!"**

if you

Mail order and remittance to

W.C. MACDONALD Inc.
P.O. BOX 1929 PLACE d'ARMES
MONTREAL, CANADA

THE MACDONALD COLLEGE JOURNAL



This journal is owned, edited,
and published monthly by
Macdonald College.

For advertising rates and
correspondence concerning the
advertising section write to the
Advertising Representative.

BOARD OF MANAGEMENT

Chairman

W. H. BRITAIN, Ph.D.

Circulation Manager

L. H. HAMILTON, M.S.

Business Manager

T. F. WARD

Editor

A. B. WALSH, B.Sc. (Agr.)

Associate Editor

H. R. C. AVISON, M.A.

ADVERTISING REPRESENTATIVE

F. GROSS

2845 Willowdale Ave.

Montreal

Telephone ATlantic 4739

All correspondence concerning
the material appearing in the
MACDONALD COLLEGE JOURNAL
should be addressed to

THE EDITOR,

Macdonald College, P.Q.

Subscription rates — 50c per year

EDITORIAL COMMENT

At the meeting of the Breeder's Associations reported in this issue the Minister of Agriculture made important announcements that will be of interest to all the farmers in Eastern Canada. The first had to do with the increased production that is required for the present year. "Produce 25% more hogs this summer than last summer", said Mr. Gardiner. "Feed more hogs; feed them up to the weight that they ought to be . . . so as to give Britain all she requires from us and meet our own needs too." Similar increases in other quotas are asked, so that the farmers can extend themselves to the limit in fighting the war on the production front.

Significant also were the statements Mr. Gardiner made regarding the government policy on fertilizer and of free freight on feed grain. The government does not want to continue to pay the freight on feed grain from the west but, if necessary, it will do so. The vote of a million dollars to help provide fertilizer may be seen as an attempt to increase production of feed grain in the east and make it less necessary to provide western grain freight free. Certainly this fertilizer policy will be widely commended in that its benefits will not be confined to one year.

Mr. Gardiner was less definite in his indication of what the government intended to do regarding the farm labour shortage, but at least it is now known that the government is alive to the problem and we may expect that some action will be taken shortly.

FARM VS. CITY WAGES

According to the report of the Bureau of Statistics which we have just received, the average wage (with board) paid to farm labour in 1941 was \$559. With board estimated at \$206. for the year the farm labourer has about \$353 in cash for his year's work.

Compare this with wages in manufacturing. In this division the Bureau estimates the average weekly wage to be \$28.15 or about \$1465. per year, cash. Assuming board in a city to cost \$45. monthly, the net cash income of the factory worker for the year is about \$900, — some \$550. more than the farm labourer.

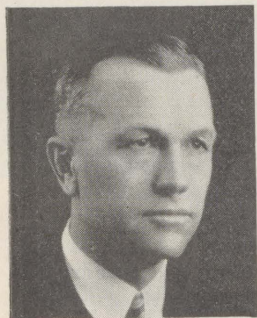
In mining the difference is still more striking. Deducting the same figure for board as in the case of the factory worker, the miner has an average cash income of \$1200. — more than three times that of the farm worker.

It is obvious that the present wages paid in farming are not sufficiently attractive to ensure that there will be enough workers to bring about that increase in production which is absolutely necessary to our war effort. Unless some hitherto untapped source of farm labour can be found — even if it is found among high school or college students, or office workers on holiday — we may find ourselves faced in the near future with a scarcity of farm products which may mean eventually — rationing.

The expending programme of the Adult Education service has been an encouraging feature of the winter. The radio forum has more than doubled its listening audience and the increased interest of rural people has been reflected in the numerous requests for information on a wide variety of subjects. Members of the service staff have been responsible for the preparation of 'Farm Forum Facts' — the weekly newspaper, which has now a national circulation of over 15,000 among radio listening groups from coast to coast. The films of the National Film Board are now being shown to over 8,000 people each month. Community conferences are planned for the spring months in various parts of the province which look forward to the provincial rally of the farmers at the College in June. On the whole it is a programme increasingly of the people and for the people.

1942 Agricultural Program Calls for Big Production

Farmers to go "All Out" with Special Emphasis on Coarse Grains



CANADA'S 1942 agricultural program calls for increased production in all feed producing crops across the Dominion with special emphasis on coarse grains, Dr. G. S. H. Barton, Federal Deputy Minister of Agriculture, told the Ontario Crop Improvement Association last month.

In a review of probable agricultural requirements for the year, with increased live stock production a major factor, Dr. Barton said that apart from wheat Canada has less than a month's feed supply on hand before the 1941 crop was harvested and termed this "a very unsafe position".

Eastern Canada could not "coast along" in feed production assuming it could look to the west for all the supplies it needed and receiving public money to bring them east. Free freight for feed was justifiable under war emergency conditions but it was doubtful if it could be considered sound practice except on a purely supplementary basis.

Dr. Barton said western wheat reserves could be maintained with much less acreage than was regarded normal prior to 1941 when a substantial reduction was made, if production conditions were reasonably favourable.

The west was in a position to increase its coarse grains acreage again this year and still meet all wheat requirements, and this was part of the crop production program, he said.

Dr. Barton said a 25% increase in vegetable crops would probably be required.

An increase of 17% in hog production compared with last year was needed and, since the increase so far this year was smaller than that figure, producers should begin to raise output by 25% over last year.

Fluid milk requirements would probably require an increase of 500,000,000 pounds, half the increase attained in 1941.

With respect to labor, Dr. Barton said that perhaps the best which could be hoped for was that every productive farm would have experienced direction whether operated as a unit or in conjunction with some other farm, and that sufficient labor would be obtained to man the key positions.

Every farmer's war effort this year should include the greatest care in selection and preparation of seed grain. Supplies generally were considered adequate to permit a full production program but some movement to meet local needs would be necessary.

Problems had arisen in the canning industry because of restricted tin supplies but this condition was being dealt

with. Products for which tin was not essential would use other materials and economy through elimination of certain sizes would be necessary. While adjustments might have to be made, an increase in certain vegetable crops was desired for canning — notably peas, corn and green beans — and for fresh vegetables and dehydrated turnips, onions, beets and cabbage.

Bacon

Besides further breeding, another method of adding to the bacon output would be to bring hogs up to full weight.

"Despite all the education, all the urging and even slaughter prohibition, producers still persist in sending a substantial number of light hogs to market", Dr. Barton said.

"The average weight of hogs marketed in Western Canada now is 157 pounds, in Eastern Canada 154 pounds. We would like to see it raised to 160 for Canada.

"If we could obtain this increase in average weight and still keep within weight requirements, we would have at least 30,000,000 pounds of additional pork products available.

"Our difficulties in hog production are not going to disappear; they will probably become greater.

"But this is so far our major agricultural effort and we have to see it through. In spite of the difficulties we must reinforce our position and begin now to raise our output by 25% over last year's production."

To meet the increased demands for milk an extra 125 pounds of milk a cow would be needed, Dr. Barton said, "and, given favorable production conditions, this does not seem too much to expect."

With proper conditioning of cattle available Canada should be able to meet domestic needs for beef and have a sufficient surplus to fill the United States quota of 193,950 head.

Marketing of sheep and lambs in 1941 suggested that the improved price for both wool and lambs was resulting in some expansion in production, which would bring total marketing through commercial channels to the highest for any year in which records had been kept.

Egg producers had responded admirably to increased requirements. This month almost 3,000,000 dozen fresh eggs would be shipped overseas.

Co-operation in farm operations and in the use of machinery exploration and use of sources of supplementary labor, community interest and assistance at peak periods of farm labor requirements, were some of the means already partly employed which could be developed to meet urgent labor needs, Dr. Barton said.

REPAIR FARM MACHINERY NOW!

The last minute will be too late — the manufacturers of farm equipment are contributing to the war effort by building tanks and guns as well as plows and harrows, and it is no longer possible to give finger-tip service on metal parts for agricultural implements. By ordering well in advance, however, you will be able to obtain repair parts and thereby avoid costly delays when field operations are started.

And there is another reason for putting farm equipment in tip-top shape early — and that is the labour shortage. With thousands of men in the armed forces it won't be possible to hire an extra man or two when field work begins, while you spend a few days trimming up the seed drill for action. If each piece of equipment on the farm is in good condition many precious hours will be saved during seeding, haying and harvesting operations.

Order Repair Parts Today

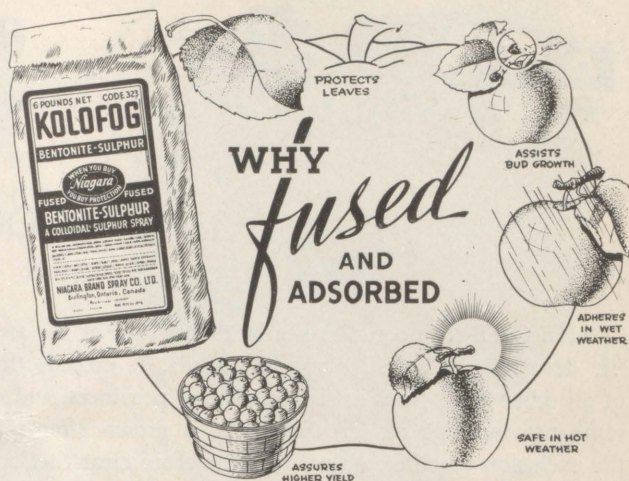
With a pencil and a note book in hand, inspect the machinery on the farm and list the repair parts which are required. Make notes of the number on each part and take a few measurements, if necessary, so the implement dealer will know exactly what material is required. The make, the model, the size and the age of a machine should always be stipulated when ordering repair parts. One or two extra parts which are in the "doubtful class" should be ordered and kept on hand in case a machine breaks down during field operations. Moderate over-ordering of repair parts is justified because the production of new machinery has been reduced.

Implement dealers will co-operate — farm machinery manufacturers have asked their distributors to ascertain as far as possible the requirements in each district to help you obtain repair parts. As for 'money' to purchase repair parts — you will always find that a dealer is willing to order and keep on hand repair parts for a good customer.

Where can the work be done? — There is usually a shed, a barn loft floor, a shop or a garage where machinery repair work can be done on the farm. It won't harm a car to let it stand outside in cool or rainy weather for a few weeks while the potato digger, mower, tractor, manure spreader, harrow or silo filler is over-hauled. A gasoline lantern will supply light for inside repair-work. Fortunately, many of the farm machines can be repaired on the farm with relatively few tools.

Overhauling The Equipment

Almost all farm machines have some wooden parts. Inspect these parts such as pitman arms, binder reel arms, canvas slats, tongues or poles, wagon boxes, etc., and renew the broken pieces. Reinforce all weakened wooden parts as they might break and damage parts of the machine which are more costly. Tighten rivets and bolts which hold these parts to the machine.



The outturn of your crop is directly affected by the method used in manufacturing KOLO Sprays. The nature of the sulphur particles and the control of its action is all-important.

KOLOFOG

Only Kolofog can give you Kolofog results. No other fungicide is made as Kolofog is made. Non-caustic, adhesive, wettable.

NIAGARA BRAND SPRAY
COMPANY LIMITED
Burlington - Ontario

KOLODUST

Kolodust is Kolofog in a hyper-fine dust form. It is particularly useful as a crop-saver when rain comes at spray time.

La Coopérative Fédérée de Québec
Distributors for
the Province
of Québec

Bearings on all machines should be given special attention. Roller bearings, ball bearings and plain bearings in wheels and in other parts of a machine should be checked carefully for wear and renewed if necessary. Wash bearings in kerosene, wipe them off with a clean rag, and repack them with oil or grease when overhauling a machine. Check also the chains the sprockets for alignment and wear. Chains will last longer if they run true and if they are given the proper slack.

In preparing any machine for the summer's work, all parts should be cleaned and bolts, nuts, keys, screws and rivets should be tightened. When cleaning a machine all oil holes and channels should be opened so oil can get to the bearings.

The sharpening of cutting devices on machines can be done today. There are mower knives, silage cutter blades, binder knives, etc., which require a keen edge to do good work. Axes, saws, hoes and a host of other small tools can be sharpened now to save time next summer.

The adjustment of parts on farm machines is very important. In many cases a machine can be put in good running order by making the proper adjustments without buying new parts. Mowers, threshers and binders are machines which require many adjustments to keep them

(Continued on page 23)



AGRICULTURE

Articles on problems of the farm

Towards a Better Oat Crop

by R. Summerby

THE OAT crop occupies nearly 25 per cent of the area devoted to all field crops in Canada. It exceeds that of all other grain crops in six out of nine provinces, and in some provinces of eastern Canada it is grown almost to the exclusion of other grains. It is therefore clear that any improvement in the oat crop would be of enormous value, not only to individual farmers but to the country as a whole.

Much can be done to improve yield and quality by attention to cultural practices such as time of seeding, preparation of the seed bed, manuring and fertilizing, but this will not overcome the weaknesses of the crop of varieties. There is much room for improvement by the choice of varieties, and there are great possibilities of obtaining better varieties than are now available.

What Should One Look for in a Variety of Oats?

One of the worst troubles with oats is their tendency to lodge. When this happens, it causes difficulty in harvesting, results in poorly filled grain, poor yields, and often smothers the newly seeded hay crop. Lodging happens more often on strong rich land where manuring has been heavy, where growing conditions are good, and where heavy storms occur. Something can be done to prevent this by avoiding heavy manuring previous to the oat crop and by balancing fertility. Further, the use of a strong-strawed variety will help in avoiding this trouble although as yet there are no varieties available commercially that are sufficiently strong to stand under extreme conditions.

Though not so common a trouble as lodging the diseases of oats are still of considerable importance. Of these, smuts and rusts are the most commonly known. Both are much influenced by the soil and weather conditions that prevail during the critical stages in their life histories. Their prevalence varies greatly from year to year. The smuts can be controlled very largely by seed treatment, but the rusts can be controlled mainly by choosing resistant varieties. Two distinct types of rust affect the oat crop; stem rust and leaf rust. It is not clear which of these causes the most damage in the different areas, nor is there sufficient information to know, at all definitely, how much the oat crop is reduced in value. It is, however, quite clear that in some areas and in some years the loss is quite large. The two rusts are distinctly different and resistance to one type does not mean resistance to the other. In choosing varieties for a district it is therefore necessary to know which rust is prevalent. Also,



A badly lodged plot of oats. Compare with the stronger variety at left.

in choosing one that is rust resistant care must be taken to choose one that has good yielding ability and good field characters as well.

A third point of very great importance in oats is that of quality. The best measure of this is the percentage of kernel. Oats will vary from 65% to 80% of kernel, depending on the soil conditions, the weather, and the variety. Quality is of particular importance in eastern Canada, for due to our climatic and soil conditions, the oats produced are not as good as is desirable. While this is true of oats in general, new varieties have been created which produce grain of excellent quality and at the same time are very well adapted for many of our conditions.

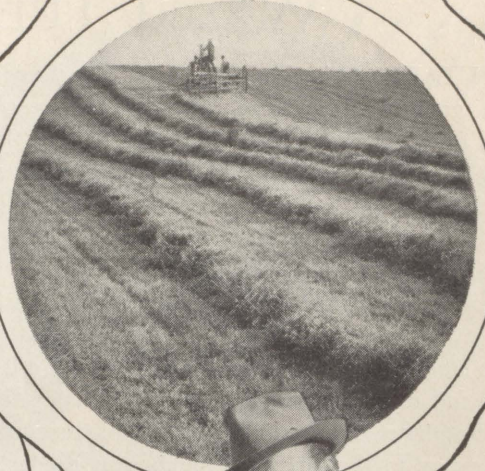
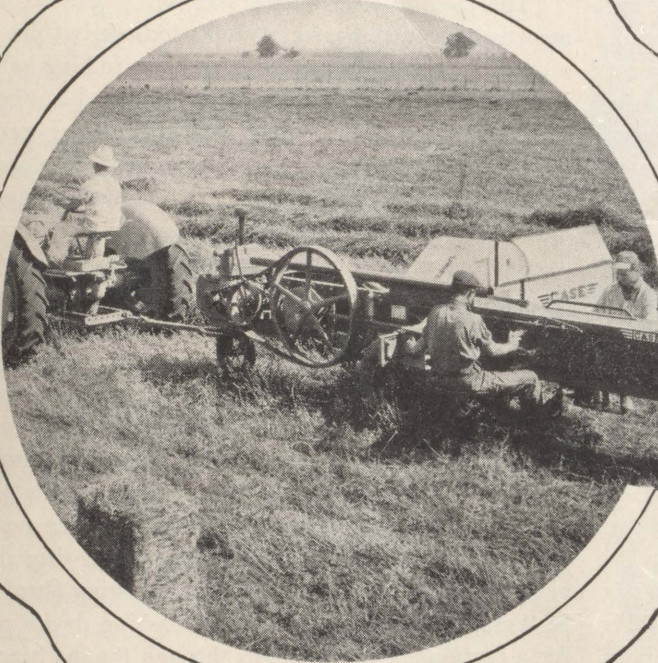
Finally, the most important point in regard to an oat crop is its feed value. The best measure of this is the yield of kernel per acre. Yield is of course influenced very greatly by soil, cultural treatments and weather. However, under the same conditions, varieties respond quite differently. These conditions vary considerably from district to district, and for this reason the best varieties for one area are not always the best for others. It is therefore necessary to choose those that are suitable for each particular district. A high yield of kernel per acre is usually produced where there is an absence of lodging, freedom from disease, and when the variety being used has a high per cent of kernel and is adapted to the conditions where it is being grown.

What Progress Has Been Made in Creating Superior Varieties?

Plant breeders at the experimental farms and colleges have been working to produce varieties that are superior

(Continued on page 7)

Green Fields Open New Frontiers for YOUTH



When mankind was young, in the pre-agricultural or pastoral period, the frontier was a new-found, far-off grazing ground. Even in the memory of men yet living the frontier was still geographical—forests laid waste by the woodsman's axe... virgin sod turning to golden fields of wheat and flax... everywhere the exploration and exploitation of added earth.

Frontiers for youth today are not in the narrow old earth, but in the boundless acreage of new ideas, new knowledge, new methods, new machines. Late discoveries in forage reveal new frontiers in soil conservation and livestock feeding. The new Case Sliced-Hay Pick-Up Baler, final stage in making air-conditioned hay by the Case System, opens one of these frontiers. It enables every-day farmers to capture and keep more protein and more total nutrients... more color and palatability... more vitamins and minerals... than ever before was feasible with field-cured hay. This compact, continuous-feed baler works with a small tractor and a total crew of three, takes seven-foot windrows at the same speed as mower and side-rake, builds bales that separate into sections as easy to feed as serving sliced bread.

New frontiers for youth are the fruit of free enterprise. Youth's chance is in progress. Only where men and money are free to dare, to risk loss in hope of gain, is there place for young ideas, young energy, young courage. Now, as a century ago, this company takes youth's part. J. I. Case Company, Toronto, Ont.

In 1842 the youthful Jerome I. Case began to furnish American agriculture with grain-saving machines. In 1942 the company he founded is celebrating its centennial with national ceremonials, historical pageantry, and educational exhibits. You are invited to witness these special events of the Case Centennial year. Look for local and regional announcements.

1842
CASE
Centennial
Jubilee
1942

CASE

Waxed Turnips Please the Public

RUTABAGA is the trade name for Swedish turnips grown for table use. However, the every day name used by growers at large is just table turnips. The story of how the lowly turnip rose to its present fame as a human food is a long one. The rather extensive export trade to the United States of table turnips is much more recent history. In this connection Mr. Barrie of Rockwood, Ontario, is credited with the first commercial shipment about fifty-nine years ago. It is reported that Mr. Barrie, who regularly shipped sheep to Boston, Massachusetts, included in one shipment some turnips as extra feed to be used at the end of the journey. Some of these turnips found their way to the tables of the Boston residents with the result that an order for a car load of good Ontario turnips was received.

From this small beginning a well worth while trade in table turnips has developed for not only Ontario turnips, but for similar products from other sections of eastern Canada as well. In the 1940-41 season well over a million and a half bushels were exported from Ontario with a considerable increase over this figure expected for the 1941-42 season. At the same time over a million and a quarter bushels were exported from the Maritime provinces.

The latest development in the table turnip industry is the covering of the root with a fine coating of wax. This idea was applied to table turnips in western Ontario a little over five years ago. The success of the original venture was sufficiently encouraging to cause its rapid adoption, until at the present time well over sixty percent of the table turnips shipped from western Ontario are thus treated. The waxed coating seems to preserve the treated roots in excellent condition but has some slight disadvantage from the shippers' standpoint. The chief disadvantage is probably the cost and trouble of applying the wax to the roots. A further disadvantage from the shipper's standpoint is the fact that the waxing seems to emphasize any imperfection in the roots so treated. This means that only high quality turnips can be satisfactorily shipped. From the consumers' standpoint this is very satisfactory.

In western Ontario almost the entire trade in table turnips has been developed on the basis of a purple topped root of medium size and good texture. The new variety Laurentian has been outstanding in its ability to meet these requirements for the waxed turnip trade.

The procedure of waxing has seen a gradual development in technique. Earlier attempts consisted of the melting of wax in a suitable container and the forking of turnips into and then out of this container, leaving them there only sufficiently long to be coated with the melted wax. Short cuts and refinements of method have been developed with the growth of the industry. A short account of the procedure followed in any of the better waxing plants will serve to illustrate what is now considered to be a good method.

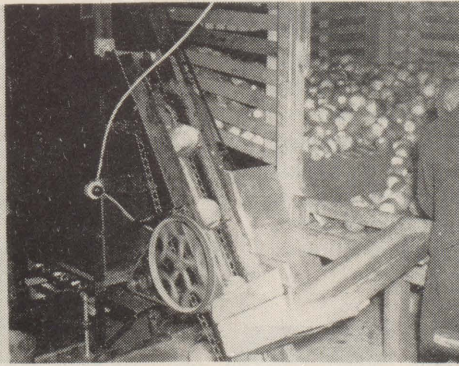
The turnips intended for the waxing plants are carefully selected from the grower's storage quarters before being delivered to the plant. On arrival the roots are again examined, and if further grading is necessary a deduction is made for the content of unsuitable roots. From the temporary storage bins at the waxing plant the turnips are transferred to a table where they are thoroughly trimmed of all projecting root growth and most of the neck. The roots then pass to a washing machine where they are thoroughly scrubbed, usually by means of rotating fibre brushes. In the more up-to-date plants the washing device provides for a continuous flow of roots through the machine. After being washed the roots are placed in drying racks where air is permitted to circulate freely around them. It is very necessary that the turnips be completely dried before coming in contact with the melted wax as it will not stick to any portions still remaining wet.

From the drying racks the turnips are transferred to the waxing machine. The newer types of waxers are automatic in operation, conveying the roots individually through the melted wax and delivering them on to a table where they stay for a sufficient time for the wax to harden.

The type of wax most commonly used at present is a crude scale wax which is comparatively inexpensive. Some operators add about seven to eight percent of resin which is



Roots being washed and moved by conveyor to the drying rack



From the drying rack the roots go to the waxing machine



Bagging the waxed roots

claimed to increase the adhesive properties of the wax slightly. The wax is held at a temperature of from 250 to 270° F. The optimum is claimed to be about 260° F.

The wax dries very quickly on the turnip, and as soon as this operation has been completed the turnips are placed in bags suitably marked with the place of origin, the trade mark and other information of sales value. As a usual thing the bags are either placed directly on a scale while they are being filled or very close to one so that no time is lost in getting the correct weight, which is as close as possible to the even fifty pounds. The bags are then sewn and piled for shipment.

The waxing industry in western Ontario has now developed to an extent where it is the exception rather than the rule to find anything but waxed turnips offered for sale by the grocery trade. Some operators are still using hand methods, but the gradual development is towards the use of automatic machinery. Much remains to be done before the commercial waxing of turnips will be on an entirely satisfactory basis, but the progress to date has been fairly rapid, and on the whole decidedly gratifying.

BETTER OATS . . . (Continued from page 4)

to the older ones in important respects. Very definite progress has been made as may be illustrated by a few examples. The *Cartier* variety has very superior quality, is extremely early and has proven itself to be very useful over large areas in eastern Canada, especially where earliness is important.

The *Erban* is a mid-season variety, with very good quality, resistant to some forms of leaf rust and a good yielder. It has proved to be a very useful oat in Ontario and is also doing well in other eastern provinces.

The *Vanguard* is another mid-season variety, which has good quality and is resistant to stem rust. It has been found to be very valuable in sections where stem rust seriously interferes with yields.

The *Mabel* variety is a very early one, with good strength of straw, producing a good yield of grain of excellent quality and being resistant to leaf rust. It is a new variety and although it is in the early stages of distribution, it has been well received where it has been tried. It is especially adapted where earliness is important and will probably replace *Cartier* in most sections where that variety is grown.

While good progress has been made, there does not appear to be any good reason why much more cannot be done. It would appear to be possible to get varieties with stronger straw, resistant to rust, smuts, and other diseases, having excellent quality, and producing good yields. The problem is to get these qualities combined in a single variety. Even when this is done it is not at all likely that one variety will be the best adapted to all sections of any province. A very considerable amount of work is already under way towards these ends, and the plant breeding nurseries are rich in parent material that may prove useful in the creation of new and still better varieties.

STOP

costly BREEDING FAILURES with

REX

WHEAT GERM OIL



This FREE Book Tells How

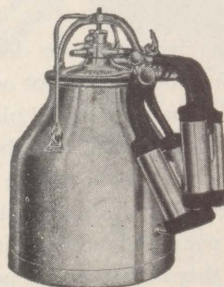
Contains 50 testimonial letters received from prominent livestock breeders. Also report of tests conducted by Dr. W. Gunn of the British Columbia Department of Agriculture and results obtained by Oka Agricultural College, Quebec.

VIOLIN (Canada) LIMITED
637 Craig St. W., Montreal

THE DE LAVAL MAGNETIC SPEEDWAY MILKER

WORLD'S BEST MILKER

The only milker with pulsations for each unit created and controlled from one central point at the pulso-pump — every cow is milked with the same uniform, regular action at all times—there are no adjustments.



SINGLE UNIT

THE DE LAVAL STERLING MILKER FOR SMALL HERDS

The wonderful "Sterling" Pulsator with only two moving parts which never require oiling provides precise, regular milking action pleasing to the cow.

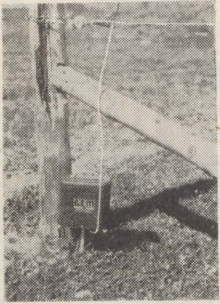
The De Laval Sterling milks fast and clean and provides De Laval quality milking for small herds at lower price. Double or single units.

\$147.50 and up

THE DE LAVAL COMPANY LIMITED
PETERBOROUGH, ONT. MONTREAL, QUE.

Electric Fences for 1942

by L. G. Heimpel



THE ELECTRIC fence is one of the newer pieces of farm equipment and, judging from the increased use on farms since its introduction a few years ago, it may safely be concluded that it is here to stay. One manufacturer who was among the first to make fencer units in Canada reports only a few sales in 1937; nearly a thousand in 1938; over

2,500 in 1939; over 3,000 in 1940 and in 1941 well over 5,000 units. Owing to the fact that there is likely to be considerably less steel available for farm fencing this year, due to the necessity for conservation of steel for war purpose, it is likely that farmers will turn to this new form of temporary fencing in even larger proportion than formerly.

This is as it should be because the electrified fence possesses many advantages and economies which cannot result in anything but the saving of money for fence users. With an electric fencer unit, some barbed wire and the necessary amount of light posts and insulators, the amount of permanent fencing on our farms can be greatly reduced. Line fences will still be needed, also road fences, but internal fencing can be reduced drastically.

Larger fields are always more economical to work than small fields and the only reason why most farms have not been subjected to internal re-planning is probably the fact that it has not occurred to the operator to change this condition. The lack of material for new permanent fencing this year, and the availability of the electric fence, where stock has to be confined, may readily be blessings because of enforced replanning.

On too many farms, fence rows have become dense strips of wild shrubs and trees. Such undergrowth not only drains the land on each side of the strips of valuable plant food and moisture during the growing season, but these wild hedge-rows occupy much valuable land which is rendered useless. Even where unchecked growth of such a permanent nature has not been permitted, fence lines always occupy some tillable land and they harbor weeds, both of which are good reasons for their elimination wherever possible. The use of the electric fence, therefore, not only brings about considerable reduction in the amount of permanent investment in farm fencing, but it is more than likely to prove the incentive to much needed replanning on a great many farms.

There is no question as to the effectiveness of electric fencing in confining livestock. Where, formerly, fences had to be kept in first class condition to withstand the attacks of the more enterprising cows of herds in pasture, the need for midsummer fence repairs has disappeared because of

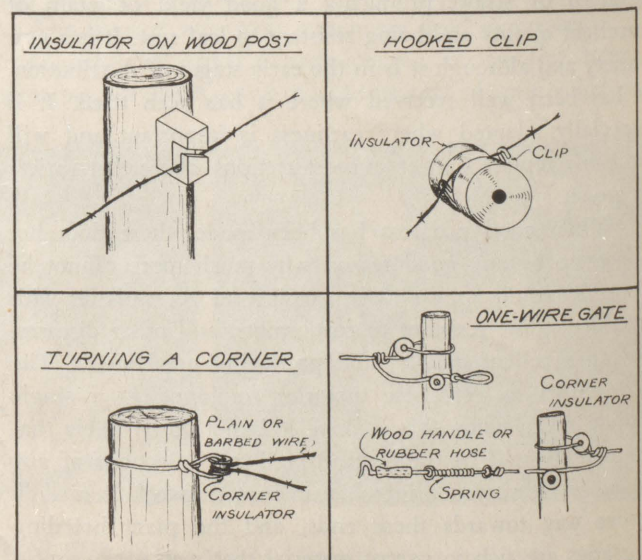
the installation of a single strand of electrified barbed wire, supported on stakes so light that they would not hold Peter MacArthur's famous cow "Fence Viewer" for a single night. Such is the healthy respect engendered in cattle and other livestock by the electric fence.

Since livestock leaves the electric fence strictly alone, once they have been shocked one or twice, heavy posts are not needed. Yet the lines of stakes should be sufficiently firmly driven, and the end posts sufficiently well anchored, that the wire will be held reasonably tight for the season. Manufacturers of electric fences usually supply printed instructions with each unit sold. These instructions should be followed in detail if this type of fencing is to give the best results.

Hints on Erection and Operation

The electric fence idea originated in the United States and there the early units were made to be operated by power line current; many makes of this type still are on the market there. However, ingenious farm boys soon attempted to harness the power lines to the barbed wire of the fence without the use of properly designed and made fence units, and accidents were the result. Occasionally animals, and even some people, have been killed by coming in contact with improvised and unsafe shocking devices of the home-made type. Governmental regulations has since been developed to take care of the situation.

Since fencer units use so little current that the consumption of current means practically nothing to power companies, the Ontario Hydro Electric Power Commission forbade the use of these devices on their power lines. The same action was taken in the province of Quebec, so that power line fencer units are not permitted to be sold in these two provinces. Electric fencer units used in eastern Canada are, therefore, all of the battery operated type. Naturally, the object is to make them so that they will draw the very



minimum of current, and tests made at Macdonald College have shown that the largest amount of current drawn from the battery by the heaviest consumer of ten fencers tested was 20 milliamperes, which, with 6 volt current, is about one-eighth of a watt of current. There is good reason to believe that today's fencers draw even less current than this. Four dry cells should run such a unit a whole season, and at least one firm is making a unit which runs on two dry cells. Where a storage battery is available, one charge will readily operate the fencer for several months, but storage batteries should be recharged every six weeks at the most, whether run down or not. The cost of operation of a fencer unit, it will be seen, is not a serious item.

Perhaps the most important thing in connection with the use of the electric fence is the training of the animals the first day they are to be confined by the fence. Such training need consist of no more than to see that each animal comes in contact at least once with the charged wire. Not many go back for a second taste and once trained they are careful not to make the experiment again.

It is important to keep down weeds and grass which at times come in contact with the wire; these will ground the current and render the fence much less effective, if the current is not grounded entirely. Only good quality porcelain insulators should be used and, for good operation in dry weather, a ground rod driven to moist earth is important. Finally, it is a good idea to place the fencer unit in a closed box securely fastened to a firm post to prevent its

being stolen. A chain and padlock may even be required. It pays also to keep track of the serial number of the unit.

TAKE CARE OF YOUR MILK CANS

Take good care of your milk cans, there's a possible shortage in the offing. That is the advice from W. J. Bird, Provincial Dairy Superintendent for Nova Scotia, who says, "We can expect a shortage of materials to manufacture milk and cream cans, pails, separator parts and other tinware required by dairymen. Take care of what you have, is good advice."

Cans should be handled carefully, says Mr. Bird. Dents and kinks, caused by rough handling, shorten the life of a can. Keep cans thoroughly washed, and DRY. Milk and cream cans should be rinsed with cold or lukewarm water immediately after using, and with hot water before using. Cans after being rinsed should be washed with hot water, adding a small amount of good washing compound. Scrub with a brush. Do not use a cloth to wash a milk can. After the can is thoroughly washed and scrubbed, scald with plenty of boiling water, or steam if available. The can should then be drained for a few minutes and afterwards should dry out from the heat of the boiling water. In winter, cans can be placed out in good weather, but they must be dry. In summer cans should be placed in the sun. A rack or bench should be located in a place free from dirt or dust. Old cans can be repaired and put into service.

FOR BIGGER YIELDS
Seed and Fertilize in
one operation with a

**COCKSHUTT
No. 11 DRILL**

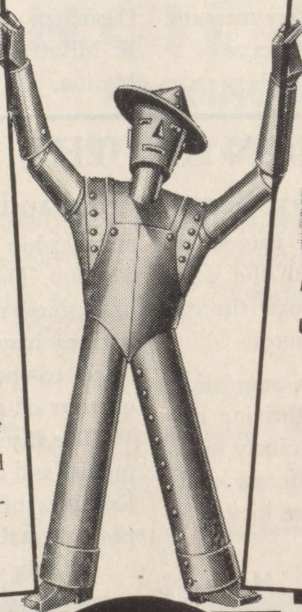
The Cockshutt Mechanized Farmhand says:

"Our No. 11 Grain and Fertilizer Drill is designed to provide long, satisfactory reliable service at lowest cost. Year after year, this crop-producing Drill will sow seed uniformly . . . at just the right depth for rapid, even germination. Distribution of seed and fertilizer is accurately controlled. The No. 11 is highly effective on all types and conditions of soil."



Replace valuable fertility while manure is FRESH
USE A COCKSHUTT SPREADER
Does a Money-Saving Job
with a Minimum of Labour

● Cockshutt Spreaders are built to make a tough job easier. Manure, in any condition, is finely shredded and evenly distributed in a wide strip. Cockshutt Spreaders stand up in heavy service for a long time. Horse and tractor models. A size for every farm. Lime attachment . . . rubber tires available.



The **COCKSHUTT**
"Mechanized FARMHAND"

illustrated above . . . symbolizes the part Cockshutt Mechanized Equipment plays in helping dairy farmers solve the problems they face today. Let him serve you.



**COCKSHUTT
PLOW CO. LIMITED**

BRANTFORD—SMITH'S FALLS

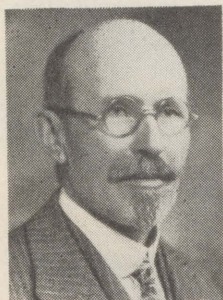
COCKSHUTT PLOW QUEBEC LIMITED, MONTREAL, QUE.
COCKSHUTT PLOW MARITIME LIMITED, TRURO, N.S.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

FEDEREE HAS BANNER YEAR



J. F. Desmarais
President

THE 20TH ANNUAL meeting of the Co-opérative Fédérée de Québec, held last month, marked a high point in the history of that organization. An enthusiastic and representative meeting of members heard the report that the unprecedented number of 58 new societies had affiliated with the Fédérée in 1941 and that the gross sales had reached the impressive figure of \$17,750,000.

This marks an increase in the volume of business over 1940 of \$3,698,697.60 and brings the total of affiliated societies to 244.

The President, Mr. Omer E. Milot of Yamachiche, urged the members to help consolidate the improved position during the coming year and appealed for a renewed loyalty to their society. He said in part — "The extraordinary expansion of our business is such that in my opinion, during the coming year, our efforts should be particularly directed to the consolidation of our enterprise. In normal times, this should be a most elementary measure of caution, but during these uncertain times, it becomes a strict duty."

Mr. J. F. Desmarais, the general manager, presented the financial report and attributed the new record to the fine co-operation of the farmer members and the devotion of the employees.

The heads of the various departments addressed the delegates in the course of the two-day meeting on problems which have been met during the year.

Patronage dividends to affiliated societies were granted by the Board of Directors amounting to $\frac{3}{16}$ c. per pound on butter and $\frac{1}{8}$ c. per pound on cheese, 10c. per bag on balanced rations, 5% on fertilizers, insecticides, binder twine, etc., 20c. per head on hogs at Princeville abattoir and 10c. per head on hogs at the Canadian Livestock Co-operative.

Vacancies in the Board of Directors were filled by the election of Mr. W. H. Latour and Mr. L. P. Rioux. The Executive committee continues as before with J. F. Desmarais as Chairman, Henry-C Bois, secretary and Omer E. Milot, J. A. Pinsonneault, Abbe S. Peltier and J. A. Marion.



Henri C. Bois
Secretary

CO-OPERATION IN THE GATINEAU

by Georges Michaud

Directly north from Ottawa, through the Laurentian Hills, flows the powerful Gatineau River. With the same swiftness that its cold waters carry fish and logs, the co-operative idea has spread along its peaceful shores.

From its northern gate, Maniwaki, with a population of nearly four thousand, to its mouth in the thriving city of Hull, the centre of the Paper Mill industry ninety miles below, not less than twelve co-operatives of different kinds have been formed in the last ten years. They are located as follows:

- 1) Three Co-operative Creameries at Maniwaki (Creamery—livestock shipping and purchasing). Gracefield, and Farrellton.
- 2) Six Co-operative banks or Credit Unions in Moncerf, Blue Sea Lake, Ste. Cecile de Masham and Hull (3).
- 3) One Insurance co-operative at Masham.
- 4) One purchasing co-operative, one co-operative hatchery, and one consumers' co-operative in Hull.

In the year 1941, the three co-operative creameries, the hatchery and the purchasing co-operative had, all told, a

membership of 450, with paid-up capital amounting to \$25,000. The assets totalled \$65,000 and the total amount of business reached \$250,000. The strength of these organizations may be realized, when it is considered that the three co-operative creameries produced last year three-quarters of a million pounds of butter.

The Insurance Group at Ste. Cecile de Masham, a parish mutual and a model of its kind, has assets at \$8,983.71 and liabilities of \$862. The amount of insurance in force at present totals \$332,375.

The six credit unions with a total membership of 1,678 members in 1941, received in savings a grand total of \$244,409. Loans to their members amounted to \$157,061.54 in the same period. Since their beginning the amount of business transacted totals \$2,680,464.82.

The co-operative idea was laid down in Hull in 1916, by none other than Alphonse Desjardins, the founder of credit unions on the North American Continent. It is at present firmly established through the efforts of generous and far-sighted men such as Lucien Caron, J. W. Delaney, Marcel Bonnier and many others.

MARKET COMMENTS

A recent announcement of the War Prices and Trade Board exempts a list of grains, seeds and feeds sold by one farmer to another for consumption. These are not subject to the Regulations of the Board.

Market prices are only one factor in returns. Another important item is the amount sold. Higher prices for apples and potatoes this year is the reflection of smaller crops. The apparent need for allowing price fluctuation according to supply has been realized and accounts for the exemption of fresh vegetables from the regulations.

There are some products bringing higher prices even though volume marketed is greater. This applies to live-stock in general and hogs in particular. Around six and a quarter million hogs were marketed in 1941. This was almost twice the number of 1938. It was three-quarters of a million more than the 1940 number. The increase was provided by Ontario and the western provinces. Quebec and the Maritimes marketed fewer hogs in 1941 than in the previous year. Apparently the price of 1940 was not high enough to tempt feeders to maintain production. Recent higher prices are expected to increase supplies.

The high price of cheese in comparison with butter is registering results. Both Ontario and Quebec report a marked increase in cheese production and a decline in

butter for the past two months.

A recent report from Britain announces the farm price of wheat, at \$3.20 per hundred weight. This is \$1.92 per bushel.

Trend of Prices

	Feb. 1941 \$	Jan. 1942 \$	Feb. 1942 \$
LIVE STOCK:			
Steers, good, per cwt.....	9.23	9.90	9.90
Cows, good, per cwt.....	6.32	7.31	7.25
Cows, common, per cwt.....	4.28	5.40	5.43
Canners and cutters, per cwt.	3.48	4.63	4.68
Veal, good and choice, per cwt.	12.05	13.73	13.65
Veal, common, per cwt.....	10.28	12.25	12.08
Lambs, good, per cwt.....	9.63	10.62	11.00
Lambs, common, per cwt....	8.62	10.25	10.50
Bacon hogs, dressed B. 1, per cwt.	11.50	15.60	15.35
ANIMAL PRODUCTS:			
Butter, per lb.....	0.33½	0.34	0.35
Cheese, per lb.....	0.18	0.25	0.25
Eggs, grade A, large per doz.	0.22½	0.34½	.33½
Chickens, live, 5 lbs. plus per lb.	0.19½	0.22	.22
Dressed, milk fed A, per lb.	0.26½	0.27	.27½
FRUITS AND VEGETABLES:			
Apples B. C., MacIntosh Extra Fancy, per box.....	1.90	2.90-3.25	2.75-3.25
Potatoes, Quebec, No. 1 per 75 lb. bag.....	0.60	1.25-1.70	1.60-1.65
FEED:			
Bran per ton.....	26.00	29.00	29.00
Oil meal per ton.....(39%)	40.00		(38%) 44.00

Quantities Limited ... but COUNCIL STANDARD ROOFING AND SIDING IS STILL YOUR BEST BUY!

• Restrictions of the Steel Controller make it possible to supply only a limited quantity of "Council Standard" Galvanized Roofing. But... so long as Council Standard is available *the quality will be maintained 100%.*

• Replacements for burned farm buildings will be given special consideration.

GET YOUR SCRAP INTO THE BIG SCRAP NOW!

Help win the war... join your local salvage committee... save Scrap Metal, Rags, Rubber, Paper, etc.

COUNCIL STANDARD
Merits Your Confidence—Good for a Lifetime

WARRANTED
REC. 1924
COUNCIL STANDARD
EXTRA HEAVY COATING

LOOK FOR
THIS BRAND
WHEN YOU
BUY!

NO MILK FOR POULTRY RATIONS

Poultrymen and commercial feed manufacturers are faced with the stark reality that dried milk products are no longer available for poultry rations. Demands for condensed milk have taken the surplus fluid milk supply.

From the standpoint of poultry feeding dried milk products, notably dried skim milk and buttermilk, are rightly held in high esteem. The main component, lactose or milk sugar, constitutes fifty per cent of the total weight and is almost completely available as a ready energy source. Milk proteins, by weight thirty-five per cent of the dried product, are highly digestible and second only to egg proteins in their completeness of variety of amino acids. The chief mineral constituents, calcium and phosphorus, are present at levels of 1.35 per cent and 0.98 per cent respectively in chemical form, surpassed by none in availability. Dried milk products rank as one of the most important sources of vitamin G, pantothenic acid, and the lesser known members of the vitamin B complex. Controlled experimental work has demonstrated that no *individual* feedstuff which is fed in a supplementary capacity up to the level of five per cent of the total ration, whether for chicks, growing stock, layers or breeders, ranks equal in nutritive value. In addition, the use of milk in the treatment of coccidiosis is well and favourably known, even if little understood. It is, therefore, not surprising that poultrymen are greatly alarmed over the possible consequences from its absence in the rations.

Substitutes Available

Fortunately, it is possible to suggest a number of very good mixed substitutes which will give excellent replacement value nutritionally. They have never been publicized in the past because there has never existed such a need.

Substitute I

- 1 part high grade fishmeal (60%)
- 1 part dried brewer's yeast

On the basis of average composition, the above combination will supply, pound for pound, the digestible protein, vitamin G, pantothenic acid, lesser members of the vitamin B complex, and calcium and phosphorus contained in dried milk products. Its greatest value would be realized in chick rations.

Substitute II

- 1 part cod liver meal
- 1 part dehydrated alfalfa meal or cereal grass

The nutritive properties of this mixture also closely parallel the nutrients of dried milk products and would give high substitution value in the rations of older stock.

Substitute III

- 2 parts fishmeal
- 1 part alfalfa meal (dehydrated)
- 1 part dried brewer's yeast
- 1 part dried whey

Distillers' grains, liver meal and dried whey are extremely valuable supplementary feeds in milk replacement, but the quantity available may prove to be a factor in their extensive use.

— N. Nikolaiczuk.

QUALITY SEED POTATOES

It has been proved beyond question, over and over again, that high quality seed is of the utmost importance in successful potato production. The average yields in Canada are far below what they should be considering the favourable climatic and soil conditions in potato-producing areas. One important reason is that too large a percentage of the fields are planted with mediocre seed, frequently the pick-outs from a poor crop of table potatoes. Anyone expecting a bumper crop of high quality potatoes from such seed is trusting more to luck than good management.

Table potatoes will grow, of course, but it should be remembered that diseases increase rapidly, especially virus diseases, and the more of these diseases in the field, the more they will be spread by various insects and the smaller the yield will be. The big mistake many growers make is to conclude that any potatoes of good appearance are good seed. That is definitely not the case. Apparent soundness constitutes no guarantee of freedom from diseases for potatoes carry viruses unrecognizable in the tubers but which, nevertheless seriously affect the yield and quality of the crop. The place these diseases can be seen is in the growing plant, and that is why seed potato certification is based principally upon field inspections.

Certified seed potatoes are potatoes that have been grown expressly for seed purposes. Diseased plants are

pulled out as they appear, and there is obviously that much less for the plant lice to carry to the rest of the crop.

Potato growers usually wait until the snow goes in the spring before giving much thought to their seed potato requirements. When certified seed is very plentiful, supplies can be secured until late in the spring, but it would not appear wise to delay placing orders this season, for there were ten thousand acres less certified in Canada this year than last, and the short potato crop here and in other countries, together with the present higher price level, might easily result in a scarcity of certified seed next spring. Under present conditions it is most important to avoid waste effort. One good way to secure maximum returns is to plant only the best seed obtainable.

The first step forward towards producing better table potatoes is to plant certified seed. Such seed is sold locally by most of the potato dealers and established seed houses, or may be purchased from the seed growers direct. Lists of growers are obtainable, free, from the Plant Protection Division, Dominion Department of Agriculture, Ottawa, or from the local District Seed Potato Inspectors located at Charlottetown, P.E.I., Kentville, N.S., Fredericton, N.B., Ste. Anne de la Pocatiere, Que., Guelph, Ont., Winnipeg, Man., Edmonton, Alta., and Vancouver, B.C.

Maritime Notes

1941 Was Turning Point in Agriculture in Nova Scotia

by Hon. John A. McDonald, *Minister of Agriculture*

I THINK we are justified in looking upon 1941 as a turning point in the fortunes of our farming industry, a period when the farmers began to come into their own at least to a certain extent.

First of all, as a result of building up of huge wartime contracts for certain food products for Britain, market prices for these products have assumed a level that offers some hope of a margin of profit. During the year these prices reached the highest point since the high-price period of 1926-29.

In the second place, certain policies demanded by our farmers' organization, backed up by the Department of Agriculture, who kept constantly bombarding Ottawa for action, began to take shape, culminating in the agreement of the federal government to absorb all freight on feeds imported into the Maritimes, thereby effecting a direct saving of up to \$8.50 per ton on these feeds, for Nova Scotia farmers. Thus while farm prices attained new high levels, certain farm costs were reduced.

In farm products such as butter, eggs, poultry and hogs, with constantly increasing wartime contracts from Britain for these products, prices have attained the highest level in 11 years, with costs of feeding cut down, a situation that present indications lead us to believe will continue for some time.

It is therefore our belief that in these main products of Nova Scotia farms there is an unexcelled opportunity for expansion, of which the farmers should take full advantage. We have made certain suggestions to the farmers which we believe may be profitably adopted during the present encouraging situation in the industry. These may be stated briefly as follows:

That, as far as possible, farm operations be organized to build up the farms on a more permanent basis, utilizing some of the extra income there may be to make the small investments necessary for building up greater soil fertility, for breaking up more land which might be utilized for crop production, or for a little labor-saving machinery in the face of the labor situation which is admittedly acute in many districts. In this connection also, farm operations might be organized a little more closely to economize in labor.

That farmers keep in mind that it is important that production of home grown feeds be maintained irrespective of the temporary advantage of cheaper imported feeds. That greater effort than ever be made by our farm families to work together for the study and solution of their own problems, through such mediums as their agricultural society or whatever type of organization they find most

effective. In this connection, all possible fields for community co-operative action should be studied.

Lime and Marl Policy — This policy, inaugurated at the beginning of the war to provide farmers with lime for farm soils at a basic price of \$1.50 ton, the lowest cost ever known, has been successful almost beyond our hopes. During 1940 a total of 30,266 tons of lime and marl were purchased by 2,618 farmers, of which more than 28,000 tons were put out under the department's policy. In 1941, a total of 3,223 farmers bought just over 30,000 tons of lime and marl under the department's policy, with an additional 4,000 going to farmers through fertilizer companies.

Land-breaking — This policy, providing equipment at nominal cost to break up rough, unused land suitable for feed crops, in 1940 brought 1,934 acres of such land into crop use and another 1,481 acres in 1941, which with a total of 1,099 acres broken up in 1939, makes a total of more than 3,000 acres added to the feed crop acreage in this way. Some of this new land has already borne two crops of feed grains.

Tile Drainage Policy — This policy, inaugurated some time ago to provide assistance to farmers to install tile drainage by use of a ditcher provided by the Department, and with reduced costs of tile, has resulted in some 15,000 feet of drainage being installed in 1940 and about 32,000 feet in 1941, with a large program in sight for 1942. Surface ditching was also carried out to the extent of 8,800 rds. in 1940 and 4,550 rds. in 1941.

Apple Tree Pulling — This policy, providing for free pulling of old and undesirable apple trees in the commercial orchards for replacement by new trees of more marketable varieties or by other farm crops, has also been used to good advantage. More than 73,000 trees have been pulled out and a considerable program is still ahead.

Soil Testing Program — Soil fertility being fundamental in successful farming, the Department has always made a special feature of its soil testing program. During 1941 our provincial laboratory at Truro analyzed some 3,200 samples of farm soils involving 1,000 farms. Over 2,000 of these samples were taken in the farm-to-farm visits made by the field men of the soils division in the "short test" program of the Department. In addition to this the customary work on the regular program of soil surveys was carried out.

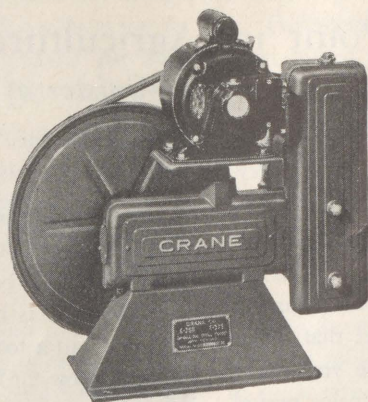
In addition to these policies the Department is carrying on its regular programs to the fullest extent, in giving every encouragement and assistance to farmers in carrying on through the trying times of war.

STRIPPINGS

by Gordon Geddes

Yesterday the last of the corn came out of the silo. It made me wonder how long it would be before there'd be more put in. Present expectations are that the labor situation will cause corn to be left out of the crops next spring. One of the neighbors who has tried both ways says that idea won't last long. Considering the way some of the cattle acted when there was occasion to omit it from the feed for a time, he may be right. Lack of silage might reduce the total amount of roughage consumed, — an important item in economical production. An all-hay diet might get pretty monotonous, especially if weather conditions made it poor hay, for good roughage is just as essential as a lot of it. Even without corn there'd still be silage if we could get some grass or legumes cut into the old barrel. But that, too, may be difficult. Lack of labor caused a reduction in the corn acreage last year and green oats were substituted for part of it. However, the oats got past the green stage before they were cut so the cattle sigh for the good old corn silage already.

The present fodder looks a little too much as if it should be under them for litter instead of in the manger. Speaking of litter, it is too bad it's such a job to get straw cut for it. With the nitrogen required for war purposes, there is more need than ever to save all liquid manure. But that can't be done by ordinary methods even when you have plenty of straw unless the straw is cut. The powers of absorption are limited in long straw and so is the amount of it one can use and still have the manure usable (and pitchable). George Johann at Dixville has a pit to save the liquid and a pump to get it into a tank to haul to the fields. The pump and the dasher for spraying from the tank came from Switzerland where they're old hands at saving manure. We can't get any more pumps from there but we can't grow bumper crops without nitrogen either.



How can a Pump help the Farmer's War Effort?

IN MANY WAYS! Primarily, and particularly where dairy farmers are concerned, through saving of labour required for the watering of stock, cleansing of equipment and relief from tire-some chores. A running water system assumes added importance in the face of increased demands for milk products for the fighting forces, a task rendered more difficult because of scarcity of farm hands who are on active service or in munitions plants. Canada is depending on her farmers to produce more than ever before, as a total war effort.

A Crane water system will lighten labour and increase production. In addition, it will provide running water so that you may enjoy the convenience of a modern bathroom, kitchen and laundry; the comfort of a hot water heating system; the security of fire protection.

Ask our branch offices in Montreal, Ottawa or Quebec for details of a water system for your farm. From the wide range of sizes, one can be chosen suited ideally to your needs.

CRANE LIMITED

**1170 Beaver Hall Square
Montreal, Quebec.**

For that matter, can we afford to waste our own supply and then buy it in bags even if it is available?

In regard to waste, the proposed gasoline ration sounds wasteful to those of us who wondered if we could conscientiously continue to drive the usual 2,000 miles per season, usually with a bag of feed packed in even on a 'pleasure trip'. Still that's only a quarter of the proposed allowance. There could be a lot of rubber saved by making it a real ration. If it left any surplus gas, there should be ways to use it up.

It also looked wasteful to see six men and two trucks surveying an improved road in mid-winter. They were digging in the drifts at regular intervals and setting their little numbered posts on each side. If it is in preparation for more road-straightening then some straight thinking should be done instead to eliminate such things for the present. If they were only trying to see if cold weather really contracted the road and shortened the distance to town, they should have been in the woods measuring off regular lengths of wood or lumber and cutting them on the mark.

According to Farm Forum Facts there seems to be some argument as to the advisability of trying to pay for the land one farms. I can't see anything wrong with starting up in business, including farming, on borrowed money except the fact that the farming business doesn't allow for repayment. The condition of the business needs improving. I hope it doesn't take too long to do so. In that I'll have a lot of company.

I'll also have company in hoping that the committee investigating our dairy business makes a quick report. Even consumers can join me though they may not realize it yet. When the officials themselves say that the subsidy on milk is only a temporary measure, it means that the quicker it is replaced with a definite policy the more milk there will be. The country will need it all and farmers need the stimulus of a definite and fair price now so they will give the cows the feed now that will make them do their best next season.

Sow
STEELE-BRIGGS



Selected
for Purity
and greater
Germination

"Canada's
Greatest
Seed House"

STEELE, BRIGGS SEED CO.
LIMITED
TORONTO • WINNIPEG
REGINA • EDMONTON

SOLD BY LEADING MERCHANTS

IDENTIFICATIONS
for
**CATTLE, SHEEP, HOGS,
DOGS, FOXES,
POULTRY**

EAR TAGS TATTOOS
LEG AND WING BANDS
PELT SEALS
LIVE STOCK SPECIALTIES
METAL STAMPINGS
and FORMINGS

Catalogue and Samples on request.

KETCHUM MFG. CO. LTD.
Box 361 - Dept. 6 - Ottawa, Ont.

Send Money by
CANADIAN NATIONAL
EXPRESS Money Order
Safe-Convenient



Payable at Par Everywhere
For Sale at all
CANADIAN NATIONAL RAILWAYS
STATIONS and EXPRESS OFFICES

THE QUESTION BOX
Have you any problems that are
bothering you? This column is at
your disposal. Address your questions
to the Editor, Macdonald College,
P.Q.

Question: What is the best fertilizer
to use on hay land?

M. E. B., La Montee.

Answer: The best fertilizer depends
a good deal upon the fertility of the
land and its condition, so one cannot
be very definite regarding the exact
fertilizer to apply. If farmyard manure
is available, a top dressing with it will
probably prove best, for it supplies all
three of the common fertilizers, Nitro-
gen, Phosphorus, and Potash, and as
well adds organic matter.

One of the best commercial fertilizers
for hay crops on light soil is 4-8-10
applied at the rate of 250 to 375 pounds
per acre. For heavy soils, similar appli-
cation of 4-12-6 or, if the land has had
manure or has grown clover recently,
a 2-12-6 should prove satisfactory.

You may obtain a copy of the Recom-
mendations of the Provincial Fertilizer
Board by writing to the Department of
Agriculture at Quebec, or from your
agronome.

Question: I would like some informa-
tion about Cossack alfalfa. I was
wondering if it would be wise to sow
some instead of Ontario Variegated, or
perhaps mix the two together. Are
Cossack and Ladak the same?


O. M. D., Clarenceville.

Answer: Cossack alfalfa is a strain
of the hardy, variegated type and is
quite similar to the Grimm and Ontario
variegated strains in both hardiness and
yield.


The original plants were collected in
the land of the Don Cossacks, southern
Russia, by Professor N. E. Hansen for
the United States Department of Agri-
culture in 1906. The outstanding char-
acteristics of these original plants were
claimed to be a marked variation in
colour of flowers, vigorous production

No. 18

**MIRACLE
BILL
SAYS**



I've often
wondered
why some kids catch
measles and mumps and
chickenpox and others
don't. I heard some doctor
explain that over the radio
last week. He said some
youngsters eat a diet that
builds up a resistance to dis-
ease — they get things they
call vitamins, and minerals—
which help keep them from
being sick. Others don't get
those things—and take sick
easy. The sooner they get on
the right diet the sooner they
fight off sickness. Well . . . I
couldn't help figuring that out
as the likely reason why pul-
lets fed on "**Miracle**" Chick
Starter and "**Miracle**"
Growing Mash are healthier.
It's got all the proteins and
minerals, and these vitamin
things, to build up the pullets
fast. Disease doesn't lay them
low near as easy. A weak,
sickly pullet sure won't be a
good layer. And so I come
to the conclusion that it pays
to feed more than scratch
grains to pullets — give them
the proper diet that comes in
"**Miracle**"
bags — The
feed in the
dotted bag.



**MAKE IT
PAY**

THE "MIRACLE" WAY

The OGILVIE FLOUR MILLS Company, Limited

42-2

of stems and good seed yields. In plot tests conducted in the Northern States and Canada, this strain has proven quite similar to Grimm in both winter hardiness and yield of hay. However, unless special care has been taken to prevent outcrossing with other strains of alfalfa, the chances are that the stocks of Cossack at present in use are badly intermixed with and indistinguishable from the other variegated strains, and not superior in any way.

Ladak is another strain of the hardy, variegated type introduced by the United States Department of Agriculture from Northern India in 1910. Like the original Cossack material, it had also a marked variation in colour of flowers. It differs from the other commonly-grown variegated strains by producing a large percentage of its seasonal yield at the first cutting. It has, therefore, exceptional value where only one cutting can be obtained, as on the northern prairies. Plot tests conducted in eastern Canada have shown that it compares quite favourably with Grimm in hardiness and yield, but the results available to date would not warrant its recommendation over genuine Grimm.

In tests made in the United States, the Ladak and Cossack strains have shown superiority over Grimm in resistance to alfalfa wilt, a disease which although serious in certain northern states, has not yet become important in eastern Canada.

Question: Please give me recipes for hard and soft soap.

Mrs. P. C. C., Waterloo.

Answer: HARD SOAP,

5 1/4 lbs fat.

1/2 cup borax (optional).

1 can lye or 3/4 lb. caustic soda.

2 qts. cold soft water. (If fat used is a very soft fat, reduce quantity of water to 1 3/4 qts.)

1. Dissolve the lye in the cold water. Use an iron or earthenware crock. The lye will heat the water. Allow to cool to lukewarm.

2. Melt the fat and heat to lukewarm.

3. Pour the dissolved lye gradually into the warm fat and stir constantly.

Use stick or wooden spoon. Continue stirring until the mixture is like heavy cream.

4. If borax is added, put in after the lye and fat mixture has been beaten for 5 minutes.

5. Pour into molds — old cake tins or shallow wooden boxes, lined with brown paper.

6. Allow to harden in a warm room then cut into cakes.

NOTE: The above may be made into a soft soap by doubling the quantity of water.

Canada's War Effort in Pictures

A very interesting booklet has been prepared by the Ontario Paper Company which shows, in a series of excellent pictures, the amazing transformation of the nation from a peace to a war footing. Every phase of the country's war action is shown; the marching of men in the Army, depth charge operations of the Navy, flying airplanes of the R.C.A.F., mining operations underground, the launching of cargo vessels, the training of mechanics for war work, the building of anti-aircraft and machine guns and the growing and processing of food for Britain, and many others.


The booklet, entitled "Each to our Part", is being distributed free in Canada and the United States. You may get your copy by writing to the Ontario Paper Company Ltd., Thorold, Ontario.

Information and where to get it

Home Made Electric Fence. Circular No. 10 Agricultural Engineering Office, Field Husbandry Division, Central Experimental Farm, Ottawa. —Free.

By following this circular an electric fence unit can be made from a Model "T" Ford coil. The unit is economical on battery current and can be made at a cost of less than one dollar if a coil is on hand. The circular also gives information on the construction of fence lines for any type of electric units. Over 2,500 farmers have already obtained plans for this fence unit.


**FASTER
GROWTH**



with
SHUR-GAIN
CHICK STARTER

Sturdier Chicks, too!

SHUR-GAIN Chick Starter will take your chicks safely through the important first six weeks with less mortality . . . build them into stronger, faster producing birds. SHUR-GAIN chick starter is a perfectly balanced ration — highly digestible . . . a proven producer.



CHICK STARTER
MADE BY
CANADA PACKERS LIMITED, MONTREAL

Eggs for Britain to be Shipped Dried

Canadian eggs for Britain are to be shipped from now on in dried powder form instead of in the shell, the Special Products Board has stated. The change will make no difference in the contract prices for export eggs in 1942, nor in the demand for all the top quality eggs that can be made available for Britain. The bonus of 3 cents per dozen on Grade A eggs to producers will be continued. Exporters will continue to offer eggs to the Special Products Board, but the eggs will be shipped for drying as directed by the Board.

The Board emphasizes that this change in the method of shipment does not reflect any change in the demand for Canadian eggs for Britain.



DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

THE QUEBEC LIVESTOCK BREEDERS' MEETING

Twenty-five percent more hogs than last year was the goal set Canadian producers by Hon. J. G. Gardiner at the banquet which closed the 17th annual meeting of the Quebec Livestock Breeders' Association, held February 26th at the Mount Royal Hotel in Montreal. Dairy products and pork products to supply fats to replace vegetable oils, the supply of which has been cut off by Japan's aggression, must be produced in greater volume than ever. Canada has the privilege and the opportunity to contribute to the winning of the war by producing farm products as never before; in fact, said Mr. Gardiner, the winning of the war depends on it.

The banquet closed one of the most successful meetings in the history of the Association. For the first time, with one exception, the annual meetings of all the 12 affiliated breed organizations were held at the same time and in the same place as the annual meeting of the parent organization, a fact which no doubt contributed considerably to the large attendance. Members of the individual societies heard reports of the activities of their organizations, and all the delegates joined forces to attend the general meetings.

The morning sessions of the general meeting were featured by addresses on livestock management and on farm management by two recognized authorities on the subjects; Prof. A. R. Ness of Macdonald College and Mr. H. R. Hare of the Economics Division at Ottawa. Mr. Ness stressed the fact that the successful breeder of livestock is the man who pays meticulous attention to details. He emphasized that every animal in the herd is an individual, and must be treated as such. Raising pure bred cattle is a complicated business and one in which careful records of the behaviour of every animal must be available if success is to result.

Professor Ness summarized briefly the progress that has been made in coping with the problem of disease in dairy herds. The tests now at the disposal of farmers by means of which they can detect the presence in their herds of Bang's Disease, tuberculosis, mastitis, etc., are a great step forward in the realm of health, but he stated that these tests were not yet used to the fullest possible extent. He paid tribute to the co-operation between breeders and the officials of the Department of Agriculture which has resulted in a great reduction in disease among Quebec cattle.

He also emphasized the value of the R.O.P. system, without which no farmer, however well he may think he knows his animals, can be absolutely sure which cows are the consistently good producers and which are not.

Farm Management Problems Discussed

Mr. Hare gave an interesting outline of the way proper farm management could turn losses into profits. A good price for products will not in itself ensure successful operation — it is the spread between the cost of production and the price received that determines whether the farm is operated at a profit or at a loss. Individual farms have little control over prices, but they are able to do something about their cost of operation.

Five factors contribute to good operation: efficient use of land, of livestock, of labour, of capital, and a large volume of business. The speaker felt that farmers, while well trained in farm practice, have still a lot to learn about farm management. He emphasized the value of planning, not only of the farm lay-out, but also the finances. A budget, carefully made out at the beginning of the year, and showing clearly all expected expenditures, including depreciation and wages for the owner, should be drawn up well in advance by every farmer.

He emphasized the fact that farmers, in preparing for the year's operations, should not be content to aim at securing an average production, but should set their aim considerably above this.

The meeting of the Ayrshire breeders heard an informative talk by Dr. C. T. Conklin in which the Approved Ayrshire Sire Plan as adopted in the United States last fall was described. We hope to publish in an early issue a complete analysis of this plan for evaluating the value of the herd sire, but according to this scheme an Ayrshire sire shall be considered approved when he meets the following requirements with all records computed to a mature equivalent, 305 day lactation period:

1. A comparison of a complete sample of at least 10 daughter-dam pairs.
2. All tested daughters must average at least 8500 pounds of milk or 340 pounds of fat with an average butterfat test of not less than 3.9%.
3. Sire must have an equal parent index of not less than 8500 pounds milk or 340 pounds fat and a butter fat test index of not less than 3.9%.

4. Not less than 70% of all the tested daughters must each make 8500 pounds of milk or 340 pounds fat.

Progress Reported

The general business meeting in the afternoon was presided over by the retiring president, Hon. Ant. Elie, who welcomed the delegates officially.

Mr. Raoul Dionne, Chief of the Livestock Branch of the Provincial Department of Agriculture, gave a summary of the year's activities, illustrated by a number of interesting charts. He pointed out that in 1941, 18.3% of all sheep going to market came from Quebec, and of these 52.5% graded choice and good. 47.4% of all rams graded were XXX in 1941, a reduction from the previous year, due chiefly to a more rigid grading system. Hog shipments continued good during the year, but the percentage of hogs being marketed light is still too high at 6.4%. 28.8% of hogs shipped graded A, 52.8% graded B, 7.2% were C and others were 4.8%. Of 138,773 cattle marketed, only 6.4% were choice and good — a much too small proportion.

During 1941 Quebec dairy farmers produced 4,164,000,000 pounds of milk, of which 37.2% was sold as milk or cream, 49% was made into butter, 10.3% into cheese, and 3.5% into other milk products. The producer received on the average 20c per gallon for milk sold in the fluid state, 37.3c for every pound of butterfat, and 14c for the milk which went into one pound of cheese. Of Quebec's 135,000 farms, 80% keep dairy cows, 5.6% of these cattle being pure breds. There are 25,900 pure bred bulls heading herds in the province. The average production per cow is 4180 pounds of milk a year.

Mr. J. P. Fleury gave an account of the activities of the Young Farmers' Clubs during the year, and made a suggestion that these groups might be received into affiliation with the Quebec Livestock Breeders' Association.

Among the resolutions adopted at the meeting was one asking the Government to exempt from compulsory military service sons of farmers, and also those hired men now on farms whose services are indispensable. The Association also went on record as favouring certain modifications in the R.O.P. regulations, but was unanimously opposed to any increase in the annual dues for this work. Another resolution, which was adopted at all the individual meetings but which was not presented at the general meeting, endorsed the scheme of calfhood vaccination, and urged the Department of Agriculture to take the necessary steps to secure a supply of vaccine and to put the scheme into operation as soon as possible.

The officers for the coming year will be: President, J. R. Pelletier; 1st Vice-president, A. E. Dyson; 2nd Vice-president, M. W. Parsons; Directors, Messrs. Beaudoin, Sylvestre, Bigué, Beauchemin, Elie, Hebert, Jargaille, Denis. All arrangements for the meeting were in the capable hands of the Secretary, Mr. L. C. Roy, who was re-elected for the coming year.

Banquet Closes Meeting

Guests at the head table at the banquet included the Federal Minister of Agriculture, Hon. J. G. Gardiner, His Honour the Mayor of Montreal, Dr. Adrien Morin, Associate Deputy Minister for Quebec, Mr. J. L. King, Deputy Minister of Agriculture for New Brunswick, J. A. Desmarais, Central Manager of the Co-operative Fédérée, Dr. W. H. Brittain, representatives of the transportation companies, the packing companies and the press, and members of the Provincial Department of Agriculture. Premier Godbout was unable to be present but sent a message of welcome by radio recording in which he asked the members of the Association to continue the good work they were doing in increasing production, and reminded them once again of their opportunity to prepare for the great task of rebuilding the herds in the ravaged countries of Europe after the war.

Mayor Raynault brought official greetings and a welcome on behalf of the City of Montreal.

Agriculture, said Mr. Gardiner, was the only industry which had been able to meet fully all the demands for greater production which had been made on it. Canada is now shipping four times as many hogs weekly as in the year before the war, and production of dairy products is higher than at any time since the peak year of 1925. Britain is now asking for all the food we can produce and it is our duty to see that she gets it.

As one means of assisting in reaching the maximum of production he referred to the policy of assistance in purchases of fertilizer, under which the Federal Government was prepared to spend a million dollars in 1942. (See *Journal*, February, Ed.) A properly fertilized field can give as much as 25% more crop with the same amount of labour, given satisfactory climatic conditions. With regard to freight assistance on feed grain purchased in the West for feeding in the eastern provinces, he stated that should climatic conditions or other factors make it necessary, this assistance would be continued, although it was hoped that such assistance would not be needed. He had no positive solution to the problem of farm labour. Referring to some cases where sons have enlisted, leaving only one son at home on the farm, he said; "Unfortunately, I cannot tell you what is going to be done about the one remaining; but I think it is the desire of everyone in Canada, and I think of everyone in the Government (and in the oppositions) to work out some system under which it will be possible to leave sufficient help on the farms in order to take care of the production of all the food products we need to produce in Canada."



Mr. J. R. Pelletier

Dr. Adrien Morin noted that we need more bacon, cheese, and eggs. Last year farmers had been asked to produce 200 pounds more milk per cow, a demand to which they had responded nobly. He now asked for a further increase of 125 pounds per cow per year. We also need to grow more grain on the farm for feeding purposes. The average production in Quebec is only 25 bushels per acre; this should be at the very least 40 bushels. This increase is particularly necessary now, for the western provinces are increasing their cattle herds and there will be less coarse grain available for shipment to the east next summer. One thousand bushels from a 100 acre farm should be the goal.

Mr. J. R. Pelletier, Director of the Experimental Farm at Ste. Anne de la Pocatière and President-elect, spoke briefly, and the meeting closed with the singing of the National Anthem.

JUNIOR SHEEP CLUBS

In 1940 junior sheep clubs were started in this province. The clubs now in operation are:

St. Augustin	13	members
St. Jean de Piles	13	"
Val David	14	"
North Onslow	26	"
St. Croix	12	"
St. Marcel	16	"
St. Modeste	15	"
St. Sylvestre	15	"
Valcourt	12	"

All the members of these clubs, and their parents, are very interested in the work and it is likely that more clubs will be organized this year. Mr. J. P. Fleury is in charge of this work.

Looking Ahead in the Maple Sugar Industry

The continued reduction in production of maple sugar in the United States and the demand for more maple products to replace cane sugar wherever possible makes it essential for us to increase to the utmost our crop of maple products.

Some farmers, arguing that since wood is bringing a good price they should turn their sugar bushes into firewood are following a short-sighted policy, and one which should be stopped. The sugar bush is a valuable permanent asset, and anyone who makes firewood of it is literally "killing the goose that lays the golden eggs."

In this connection, however, it should be pointed out that restrictions in the use of certain metals which are needed in manufacturing of war materials are going to mean less equipment available for sugaring. This will apply particularly to the supply of sap buckets. Any materials which are going to be needed for this spring's crop should be ordered immediately.

A NEW POLICY WILL HELP HOG RAISERS

A new farm-grain competition for home grown feeds is being undertaken by the Department of Agriculture and the Agricultural Societies of the Province. The purpose of the new policy is to stimulate hog production and increase the amount of feed grain grown on the home farms.

To benefit from this policy the farmer must sow at least 5 acres of grain for every sow he keeps. For every acre sown under these conditions the Department will pay a bonus of \$2.00 up to a maximum of \$20.00. For example, if a farmer has two sows he plants 10 acres of grain and is eligible for a bonus of \$20.00. If he has three sows he plants 15 acres, and is again eligible for the maximum bonus, \$20.00. If, having three sows, he plants only 10 acres of grain, he gets no bonus. He must plant 5 acres per sow to be eligible.

These bonuses are paid 25% by the agricultural society and 75% by the Government.

Empty bags are valuable — and are going to be more valuable, for the jute of which they are made comes from those areas of the Pacific which are now in enemy hands. It has been brought to our attention that certain individuals are going through the country buying empty bags at a fraction of their present value, although the price they are offering is a little higher than the one we are accustomed to set on empty bags. If you must sell your empty bags, see that you get the market price — but our advice would be to hold on to them — you will need them all later.

TREAT SHEEP NOW

Stomach worms and nodular worms, two of the most common kinds of internal parasites affecting sheep can be effectively controlled by treatment with tablets containing the worm-killing drug, phenothiazine. The most effective time to give this treatment is in the late winter or early spring, before any of the adult sheep get out on pasture in the spring. It is not advisable to treat pregnant ewes within one month of lambing time. The time of lambing will determine whether the treatment should be given before or after lambing. Ewes may be safely treated five days after lambing.

Information concerning the purchase and price of these tablets and detailed instruction regarding doses is given in War Time Production Series Bulletin No. 51—"Control of Certain Parasitic Worms in Sheep". This bulletin is available from Publicity and Extension Division, Dominion Department of Agriculture, Ottawa.

Varieties of Farm Crops Recommended by the Quebec Seed Board for 1942

The Quebec Seed Board publishes herewith the list of varieties of field crops which it recommends for 1942. In most cases the varieties have been chosen after they have been thoroughly tested in experiments and under farm conditions. In other cases, the recommendations are based upon the general practice of growers.

GRAIN CROPS

OATS:

Cartier:—Very early, very good quality, good yield.

Mabel:—Very early, very good quality, good yield, resistant to leaf rust and therefore specially recommended for districts where leaf rust is a serious factor.

Banner:—Medium maturity, good yield, generally adapted.

Erban:—Medium maturity, good quality, good yield and resistant to leaf rust.

Lasalle:—Medium maturity, very good quality, good yield. Specially recommended for the district of Montreal as it produces a good quality of grain in hot, dry seasons.

Vanguard:—Medium maturity, good quality, good yield resistant to stem rust and therefore specially recommended for districts where stem rust is a serious factor.

BARLEY:

Byng:—Six-row, smooth-awn, medium maturity, excellent yield. (Not specially recommended on very rich soil where the crop is apt to lodge, and not used for malting.)

O.A.C. 21:—Six-row, early, fair yield, generally adapted, specially recommended for malting purposes.

Pontiac:—Six-row, rough-awn, medium maturity, good straw, good yield, and generally adapted. (Not recommended for malting.)

WHEAT:

Coronation:—Bearded, white chaff, late maturing, good for breadmaking, resistant to stem rust.

Garnet:—Beardless, very early maturing, and good for bread-making.

BUCKWHEAT:

Japanese:—Smooth-hull, large seed with vigorous growth.

Rough-Hull:—Very small seed, rough-hull, suitable for feeding purposes only.

Silverhull:—Smooth hull, small seed.

FIELD PEAS:

Arthur:—Medium maturity, medium size, short straw, suitable for grain and for soup.

Chancellor:—Early, small size, medium length of straw, suitable for grain, for O.P.V. mixtures, and for soup.

FIELD BEANS:

Improved Yellow Eye:—Early, very large seed, with yellow eye. Suitable for table use where there is no objection to the yellow eye.

Navy:—Early, white, large seed, suitable for table use.

Robust:—Later, small seed, good yield, suitable for table use.

FIBRE FLAX:

Liral Dominion:—A new variety developed in Northern Ireland which has given particularly fine results in Canada. The variety is tall and of a particularly vigorous habit.

Stormont Cirus:—Rather late, very long and strong straw, very good yield of fibre and a fair yield of seed. The quality and the strength of straw place this variety among the best.

Stormont Gossamer:—Late, long straw, rather weak. Good yield of fibre and very good yield of seed. The fibre is of good quality and this variety ranks with Cirus as one of the best.

GRAIN MIXTURES

Under some conditions it may be desirable to grow mixtures of grain. When this is done it is important that the varieties used should ripen at the same time. They should be chosen from those that are recommended for the different districts.

EARLY MIXTURES

Rate per acre

An early variety of oats such as Cartier or Mabel 50 lbs.

O.A.C. 21 or Byng Barley..... 50 lbs.

MEDIUM LATE MIXTURES

A medium variety of oats such as Banner,

Vanguard or Erban 50 lbs.

Pontiac Barley 50 lbs.

As the Seeds Act does not provide for seed grain mixtures, the mixtures recommended cannot be purchased. It is therefore necessary to make up the mixtures at home by using the proper varieties, proportions and rates.

CORN CROPS

ENSILAGE VARIETIES:

OPEN-POLLINATED—

Longfellow:—An eight-row, yellow flint, early maturing.

Salzers (North Dakota):—An eight-row, white flint, early maturing.

Golden Glow:—A fourteen to sixteen-row yellow dent, medium maturing.

White Cap Yellow Dent:—A fourteen to sixteen-row, white capped yellow dent, medium maturing.

Silver King (Wis. No. 7):—A fourteen to sixteen-row white dent, medium to late maturing.

HYBRIDS—

Algonquin:—This is a variety hybrid. The seed sold is a light yellow color but the crop grown produces ears with a mixture of yellow and white kernels. The variety is very early maturing.

Wis. No. 531:—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is early maturing.

Wis. No. 606:—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is medium maturing.

Wis. No. 645:—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is medium maturing.

GRAIN VARIETIES:

Quebec No. 28:—A twelve-row yellow flint, for grain only, early maturing.

ROOT CROPS

In the following list of root crop varieties all of the swede and mangel sorts are registrable. The Board recommends the use of registered seed. Experience has shown clearly that ordinary commercial seed cannot be depended on for quality, uniformity or trueness to type. In contrast, the registered material is being constantly selected and is being grown and packaged under strict supervision. It therefore represents the highest grade of root seed available and, while it will cost more, the results will justify extra expenditure.

SWEDES:

Acadia:—A globe-type with purple skin colour.

Ditmar's Bronze-Top:—A flat-globe to globe-type with green to bronze skin colour.

Laurentian:—Globe to slightly longer than globe-type with clear purple skin colour.

Wilhelmsburger:—Globe-type, with green skin colour. Recommended as possessing resistance to club-root.

MANGELS:

Frontenac:—Intermediate, of orange-yellow colour. High in yield and medium in dry matter.

Giant White Sugar:—Half-long, white, rather low in dry matter.

Prince:—Half-long, white, low in dry matter, high gross yield.

Tip-Top:—A short intermediate, of orange-yellow colour, high in dry matter.

CARROTS:

Giant White Belgian:—Very long type, slim, grows one-third out of ground.

White Intermediate:—Intermediate, grows entirely under-ground.

POTATOES:

Irish Cobbler:—White, good quality, especially suitable for an early crop.

Carmen No. 3:—White, good quality, suitable for main crop.

Green Mountain:—White, good quality, suitable for main crop, on light soils.

HAY AND PASTURE CROPS

ALFALFA:

1st Choice:—Registered Grimm.

2nd Choice:—Certified Grimm or Certified Ontario Variegated.

MIXTURES FOR HAY

Mixture "A"

For well-drained, non acid soils

Rate per 100 lbs.

Timothy	50
Red Clover	20
Alsike Clover	5
Alfalfa	25

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

Mixture "B"

For soils, not well-drained

Rate per 100 lbs.

Timothy	50
Red Clover	30
Alsike Clover	20

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

MIXTURES FOR HAY FOLLOWED BY PASTURE
FOR 2 OR 3 YEARS

Mixture "C" (*)

For soils inclined to be acid

Rate per 100 lbs.

Timothy	47
Red Clover	20
Alsike Clover	13
Kentucky Blue	13
Red Top	7

Rate of Seeding:—12 lbs. per arpent
15 lbs. per acre

Mixture "D"

For well-drained, non acid soils

Rate per 100 lbs.

Timothy	48
Red Clover	15
Alsike Clover	8
Alfalfa	16
Kentucky Blue	13

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

MIXTURE FOR PERMANENT PASTURE (†)

Rate per 100 lbs.

Kentucky Blue	25
Canada Blue	25
Timothy	45
Wild White Clover	5

Rate of Seeding:—16 lbs. per arpent
20 lbs. per acre

(*) Add 1 pound of wild White Clover per acre where it does not volunteer readily from the soil.

(†) On tillable lands this mixture may be seeded in the spring with a light nurse crop or in early August without a nurse crop. It may be used also on rough land where the seed can be worked in.

RAM GRADING INCREASES

We have received a report of the ram grading done in Quebec in 1941, and one showing ram lambs and yearling rams graded since 1933. From 1933 to 1940 there was an increase in the percentage of XXX rams, but a decrease in 1941. This is explained by the fact that grading, both in the weight of the rams and in breed characteristics was very severe last year. The grader, Mr. Robinson, finds that breeders throughout the province are very interested and there is a big demand for sheep. There is no doubt that the number of rams graded in 1942 will be larger than ever before.

RAMS GRADED IN 1941

Breed	XX	XXX
Leicester	359	170
Oxford Down	190	169
Shropshire	47	82
Hampshire	24	55
Cheviot	15	19
Cotswold	6	—
Southdown	1	4
Dorset Horn	—	2
	642	501

RAMS GRADED 1933-1941

Year	XX	XXX	XXX% of total
1933	1125	241	18.0
1934	829	402	33.0
1935	837	486	36.0
1936	745	538	41.9
1937	779	503	39.2
1938	784	581	42.5
1939	555	640	54.0
1940	473	625	56.9
1941	642	501	43.8

Sugar for Beekeepers

Beekeepers requiring sugar for feeding bees must apply in writing to the Sugar Administrator, through the provincial apiarist of the province in which they reside, stating the number of colonies and minimum amount of sugar required. On verification of these particulars the provincial apiarist will issue a "beekeeper's sugar purchase permit."



THE COLLEGE PAGE

News of the College — Staff, Students, Graduates

THE FRIENDLY INVASION

Preparations for the arrival of the Canadian Women's Army Corps occupied most of the time of the College authorities during February, and a crew of 30 workmen were busy all month preparing new dormitories for the men students, adapting the Men's Residence for occupation by the women students, and making the necessary changes in the Women's Residence, which now houses the members of the C.W.A.C.

Even before the School for Teachers moved out on January 28th workmen had started building the new dormitories on the third floor of the Main Building. This involved partitioning the classrooms and other large rooms into apartments, building cupboards, installing bathrooms and showers, and putting in new lighting equipment.

A trunk room has been built in the basement and space has been found for the men's coffee shop in what used to be the workshop of the School for Teachers.

In the dormitory, not more than 6 students have been put into each apartment. There is a large window in each, new overhead lights have been installed and each study table has a desk lamp on it. There is one bureau and one table for every two students and every man has his own locked clothes cupboard. The accommodations, while not quite as elaborate as in the old residence, are none the less quite satisfactory and the students admit that they are much more comfortable than they had expected to be. Senior students are living in Harrison House and in one of the College houses on Maple avenue.

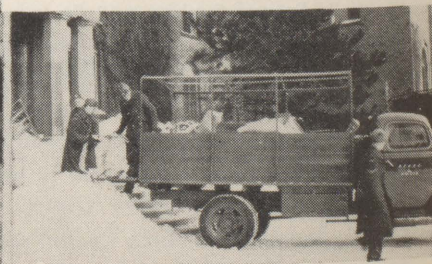
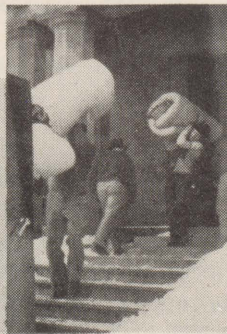
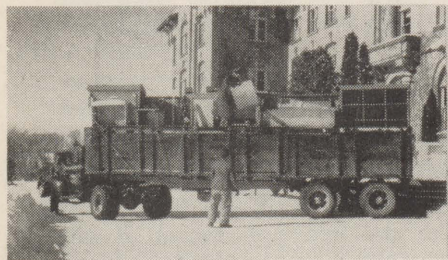
The men students moved into their new quarters on the week-end of February 14th, and the women students took over the Men's Residence on the 18th. The men

students helped them to move, assisted by the outside staff of the college with three moving trucks. Not many changes were necessary to adapt the Men's Residence for the use of the women students; they will have practically the same accommodation that they had in their old residence, except that the gymnasium and swimming pool are smaller, and their reception and common rooms are not as convenient.

It is in the Women's Residence, now occupied by the C.W.A.C., that most changes have been made. All the furniture has been moved out and replaced by equipment furnished by the Army. This includes the dining room furniture; the heavy oak tables have been replaced by trestle tables and folding chairs so that the room will be able to hold the 900 persons who will be eating there every day. The basement has been converted into stockrooms for the Quartermaster's stores, and living quarters for the instructors who will be in charge of training.

In the dining room a cafeteria system has been introduced. Diners enter by the first foyer door, pass along a counter which has been built where the warming racks used to stand, fill their trays and enter the dining room through a wide door which has been cut through the wall. To cook and serve meals for such a large number has required the purchase of considerable new equipment of all sorts — stoves, stock kettles, dish-washing machines, etc., all of which are now in place.

Miss Barbara Macdonald, B.H.S. '41, has been appointed assistant dietitian at the King Edward Hospital in Hamilton, Bermuda. The dietitian at the hospital under whom she will be working is Miss Dorothy Haslam, who graduated from Mac with the B.H.S. degree in 1934. Both these girls took their post-graduate training at the Montreal General Hospital.



The School for Teachers goes to Montreal,

the students change residences and . . .

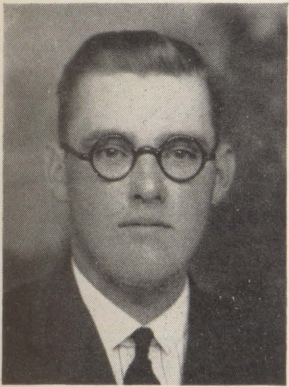
the Army moves in.

THE MACDONALD CLAN

Notes and news of graduates and former students.

WILLIAM ERSKINE RODGER

R.R., 4, Lachute, Quebec.



Mr. Rodger was born in 1904, the son of Chas. R. Rodger, a prominent and progressive farmer of Argenteuil County. Erskine got his early education at the rural school near his home at East Settlement and at Lachute High School. He was one of the pioneers in the Macdonald College winter course, attending college in 1922-23.

On his father's death in 1927, Erskine and his brother Allan continued to operate the farm until 1934 when Erskine took over the home farm.

Mr. Rodger was married in 1933 and has three young sons.

Early in his life he developed an interest in Ayrshire cattle and was one of the first in the district to undertake R.O.P. work. His early efforts along this line were the stimulus for many farmers in the district to follow suit. He has continued to improve his stock and takes a prominent part in the exhibition at Lachute as well as exhibiting at Toronto and Ottawa. Several of his cows have ranked high in the Ayrshire records and have stood among the top notchers at various shows.

Mr. Rodger has taken a very active part in the community life of the district. He was at one time president of the Laurentian Ayrshire Breeders Association and is now secretary-treasurer. He is a director of most of the agricultural organizations in the vicinity, and has won a silver medal for his farm.

Leonard S. McLaine, who for the past five years has been Chief of the Plant Protection Division, Dominion Department of Agriculture, has been appointed Acting Dominion Entomologist. Mr. McLaine has been associated with the entomological work of the department for the past 29 years. Since 1922 he has been Secretary of the Destructive Insect and Pest Act Advisory Board. He takes over the duties of Dr. Arthur Gibson, who is now on retiring leave.

James Peter Warbasse, a great American co-operator said: "We live in a harmonious universe. Harmony is life. Lack of harmony is death. War is a sign of the violation of natural law. What man calls co-operation is the way of trying to conform to that law. And in that law, he may live in harmony, in abundance, and in peace with his fellow men."

REPAIR . . . *(Continued from page 3)*

running properly. On a mower, the guards should be set in line, and the wear plates and clips should be adjusted. Worn guides should be replaced and adjustment should be made to make the knife run squarely on the guard plates. On a binder all of the knottor parts should be carefully checked. An old sack can be rolled up and used as a sheaf in testing the tying mechanism. Detailed instructions on the overhauling of a mower are given in the June 1941 issue of the Journal, and an excellent article on "How To Cure Trouble in the Binder" was published by Professor L. G. Heimpel in the first issue of the Journal.

Other Equipment On The Farm

There are other tools and implements on the farm that are just as important as the binder. Hay Fork pulleys, ropes, well pumps, small gasoline engines, fanning mills, milking machine pumps, wagons, hay rakes, barn door hinges and a hundred and one pieces of equipment which require a few repairs to put them in good running order. Parts for such equipment should be ordered early. The repair work should be done now.

C. W. A. C. RELIEVE SOLDIERS

It is expected that the early months of spring will see several thousand women in the Canadian Women's Army Corps, according to plans to relieve men for field service by this means.

Duties which these women will be called to perform will be driving light transports, messenger service, Army stores, help in canteens, telephone operating, office work and cooking.

Conditions under which the women will enroll will be practically the same as men soldiers, with payment at a somewhat lower rate. Already many girls have left office positions and other work and are taking over the duties assigned to them in this new field of action. A good deal of planning and adjustment will be necessary in household economy in Canada as elsewhere between the home, the factory and the Army.

Finally, and as the sum of my conviction, we need more thought, more study, more intellect, infused into our agriculture, with less blind devotion to a routine which, if ever judicious, has long since ceased to be so. The tillage which a pioneer, fighting single-handed and all but empty-handed with a dense forest of giant trees, which he can do no better than to cut down and burn, found indispensable among their stumps and roots, is not adapted to the altered circumstance of his grandchildren. If our most energetic farmers would abstract 10 hours each per week from their incessant drudgery, and devote them to reading and reflection with regard to their noble calling, they would live longer, live to better purpose, and bequeath a better example, with more prosperity, to their children.

Horace Greeley



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

W.I. Notes

by M. Elizabeth McCurdy

Red Cross And War Work

WORK FOR the Red Cross and general war work continues to absorb the energies of the members of Quebec Women's Institutes. From the sending of tea-bags to sister members in the old land to the purchase of Victory Bonds, their services run the whole gamut of individual and group effort.

A new feature is the sending of medical supplies to Russia. Frontier and Wakefield both contributed to this worthy cause. Each member of the former Branch answered the roll call with a quilt block which later formed a part of the finished article. Upper Lachute-East-End contributed 3 quilts and children's clothing to the Red Cross. Aylmer East turned in finished articles and distributed more material. Richmond contributed slab chocolate for R.A.F. Comforts, and turned in knitted articles. Eardley sent 3 quilts, 7 pillows and 40 articles of clothing to the Red Cross. Rupert sent 5 quilts, with sewing. Wakefield sent pyjamas, gloves, scarves, bed jackets, and 15 articles for Air Raid victims. Wright Branch maintains a special fund for soldiers, boxes sent by this means being gratefully acknowledged.

Bristol Busy Bees donated \$5.00 to Pontiac Ambulance Fund, and purchased a War Savings Certificate. The proceeds of a tea, \$12.00, were devoted to war work. Clarendon contributed quilts, and Shawville donated \$10.00 to the Russian Relief Fund. Stark's Corners contributed a comforter and clothing to the Red Cross, and Wyman sent tea to an English Institute, and quilts and boxes to local boys and a girl overseas.

An incomplete report from Sherbrooke county shows that 40 knitted articles, 3 quilts, sewing, comfort bags, and bundles for Britain were given to the Red Cross during the month. Boxes for soldiers, contributions to special funds, chocolate for the R.A.F. Comforts were among the supplies provided in the County.

Granby Hill made 18 knitted articles, South Roxton 21.

Beebe sent 10 lbs. of chocolate to the R.A.F. Comforts, and 49 boxes to local boys overseas. Food and parcels for prisoners of war were also sent.

The branch at Hudson Heights has a long record of work to report for the last of the year. 81 quilts, several knitted sweaters, 1002 articles in Bundles for Britain, contributions to the W.A.T.S. in London, Comforts Fund, Bristolian Society, Montreal, Lord Mayor of London,

W.V.S. For Civil Defences, H.R.H. Princess Elizabeth Fund, East End Hospital, London, \$10.00 to the Queen's Canadian Fund. Grateful acknowledgement was received from these recipients. Mrs. G. B. Falconer Publicity Convener of the branch, is taking the place of the regular convener for the year.

Howick bought \$10.00 in War Savings Certificates. Huntington sent \$4.00 in chocolate to the R.A.F. Comforts, clothing for children in the bombed areas, and received 14 letters from overseas boys who had received boxes from the Branch.

Life of Early Settlers Described

Dr. H. R. Clouston was guest speaker at the meeting of Huntingdon Women's Institutes, his topic the pioneer life of Huntingdon County. The long journey from the Old Country in 1820, the hewing of primitive homes from the primeval forests, primitive methods of cooking, and the struggle to preserve life in the cold winters were graphically described by the speaker.

Dr. Clouston exhibited several curios, among them Indian weapons, bullets from long-ago battle-fields, old books and Bibles and other relics of the less complex times in the early days of Canada.

Home Economics

Mrs. A. E. Abercrombie, local convener for Lennoxville Institute, gave a number of interesting facts dealing with the Industries of Canada and their output in the Canadian war effort. Members were asked to check on food prices between September 15 and October 11 in co-operation with the Prices and Trade Board. Belvedere held a thrift competition and Ascot a rummage sale.

Granby Hill and South Roxton had talks on Canadian Industries, and Morin Heights a paper on the making of glass, now an important industry relating to the war. Lachute had a demonstration on salad making by Mrs. Honsberger, and Pioneer heard an article read which described the uses of sawdust for domestic purposes. A bean supper followed a drive enjoyed by Brownsburg members to the home of Mrs. A. Campbell where the meeting was held. Elmside had papers on Canadian oil-wells and the demand for aluminium.

Education

"The Restraints of Freedom" was the subject of an address by Rev. O. Osborn, who was present as guest speaker at the Study Group meeting in Lachute. Granby

Hill held an amateur contest, as well as an observation contest. Morin Heights sponsored the showing of moving pictures supplied by the Adult Education Association, once monthly. Principal Hall addressed the meeting on Compulsory Education. Howick supplied gramophone records for use in the High School. Rev. Mr. Hudson addressed this Branch on "To-day's Challenge." At a later meeting Rev. C. Leslie Taylor gave an interesting travel-talk, covering Canada from coast to coast.

Early in the school year Bury Branch began supplying hot school lunches. Ascot Branch made improvements in the equipment of the Consolidated School kitchen, and Belvedere contributed money to the milk fund of a Sherbrooke school, as well as to a rural school. Hudson Heights held a social gathering to provide seeds for school gardens. This Branch takes travelling libraries, and supplied a radio in the school. Eardley had a paper on School Law, and Wakefield convened a meeting for the discussion of Central School Boards. Rev. Mr. Hamilton addressed the Branch on "Irish Legends."

Canadianization

Howick Branch had several readings on International Relationships, and Wakefield held an exhibit of posters on Canada's share in the War, and arranged to have Government films shown on the subject. This Branch, and also Wright Branch, discussed the Price Ceiling movement, and promised co-operation. A paper on Citizenship by Miss Lilly Thayer was a feature of the programme at Wright Branch meeting. Bristol Busy Bees had a paper on National and International affairs, and Wyman one on the Women of Great Britain.

Mrs. W. J. H. Kuhring spoke to Lennoxville Branch in the interest of the Norse sailors between Canada and Great Britain, asking for co-operation in the making of leather vests. A meeting was called for the following evening to plan the work. Ascot Branch discussed foreign races in Canada, and their contribution to the national life. Beebe Branch studied laws governing women in Quebec. Aylmer East invested \$100.00 in the latest Victory campaign.

Agriculture

Aylmer East Branch was addressed by Mr. Haas of Macdonald College, sponsored by the Adult Education Association. His subject was "The Farm Forum". The cultivation of flax in Quebec was discussed during the meeting.

Stanbridge East improved the appearance of the approach to the village by grading and seeding a section of unsightly ground.

Child Welfare

Hudson Heights spent \$25.00 in helping sick and needy people in the community, besides other gifts. A doctor's bill was paid by the Convener of Child Welfare, Mrs. Tyson Williams.

Stanbridge East had a paper on the discovery of insulin. Frontier sent \$8.00 to the Children's Memorial Hospital,

together with several scrap books. Lachute sent jellies and jams to Grace Dart home and to Ste. Agathe. Howick Branch voted \$5.00 to the V.O.N. in Montreal.

AFTER THE WAR

by M. Elizabeth McCurdy

War never leaves a country or a people as it found them. There is a forced growth during periods of war, in one direction or another. Either there is an impetus towards improved conditions, or there is a reaction and an inclination to sit back and let things take their course. Something of this sort happened after the First Great War. There was a throwing off of the responsibility of reconstruction, a plunging into harmful excesses, the pursuit of pleasure at all costs, and few realized that these were factors leading inevitably to a second and greater world upheaval with all its attendant evils.

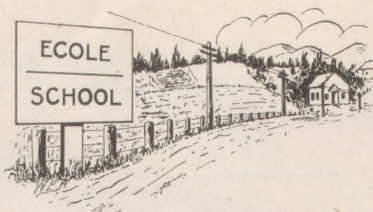
This experience, however, has not been entirely lost. Many of the best minds of the world of to-day are working on the post-war problems of the future. One point seems to be agreed upon and that is that to economic insecurity may be traced much of the unrest, political troubles and the general dissatisfaction existing at the present time.

The net result of the efforts of countless charities to date has been at best but a patchwork of organizations, often overlapping each other, and again leaving many loopholes for want to enter. Only when matters have become desperate, and the sense of self-respect of the needy has entirely gone is help possible. The whole plan is so strongly flavoured with charity that is repugnant to many who through no fault of their own are unable to provide for themselves the necessities of life.

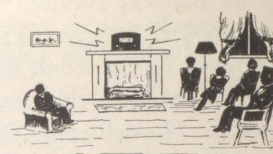
Mr. J. R. Sullivan, a prominent South African Social Worker, has outlined a Social Security Code which is commanding the interest not only of thinking people in his own country, but in many parts of the world. Mr. Sullivan plans in this reform to build up the home and family, the cost to be borne jointly by the citizen and the Government. These means of security are:

State medical service and free hospital service; unemployment sustenance benefit; sickness and invalidity benefit, including an allowance for children; widows and orphans pensions; family allowance to all families below a certain rate of income; superannuation age benefits.

None of these benefits would be charity or approach the dole system, because every family would have paid into the citizen's share of the fund, and so would be entitled to draw upon it when needed. There would be no politics concerned in such a plan. It would be something to which the citizen would have a claim, as he would have regularly contributed a percentage of his earnings, and need not feel that he was doing that most repugnant of all things, accepting charity.



LIVING AND LEARNING



Rural Education Takes Stock

We are so accustomed to hear—especially around election time—that the farmer is “the backbone of the country”, that we no longer take it very seriously. And yet it is literally true. Not only is the material prosperity of the rural population essential to national well-being, but, as the governments of all civilized countries recognize, there are special qualities in the rural population that must be conserved in the interests of national strength and national stability.

But if the rural population is to furnish those qualities, if it is to hold its own with highly organized urban industries, it should be an educated population. It should, furthermore, have a type of education suited to its way of life—one that will help to offset the disadvantages of the weak and scattered nature of our farm units. Are they getting it? If not, what is preventing it?

Opportunities Unequal

A stranger from an educationally advanced country would be mystified to observe the situation that exists in the typical school section or municipality in this country. He would be puzzled by the “set up” of the local management of the typical one-room country school. He would be puzzled by the inequalities that exist in a country where “equality of opportunity” is supposed to be the cardinal principle of its political faith. He might find one district with a fine school and a well-paid and well-qualified teacher, because it happened to be near a power plant or an industrial development. Five miles away he might find a poor school with a poorly paid and less well-qualified teacher, because there happened to be no power plant or no industrial development in that section. He might be mystified to explain why, in rural districts, large industries were not expected to pay taxes commensurate with those collected in the city or where the “larger unit” prevails. His surprise would no doubt be all the greater when he observed the obvious need for more funds for educational purposes. He might find two properties of approximately the same value side by side, with one paying double the taxes of the other because they happened to be located in two different school municipalities. He might find unexplainable variations in the tax rate or in the assessment rate between different localities. He might well wonder who invented such a system and why people continue to tolerate it.

Time Marches On

But it is very easy to explain the circumstances that brought the small rural school into being. “Each tiny group of pioneers turning aside for an hour or two from taming the wilderness, putting together hurriedly with the

materials which lay to hand, the building that traditional sentiment has cherished as the little red school house.” In the early days of our country, settlements were sparse and scattered. “Roads were few and poor; transportation was limited to the horse and buggy. It was natural—indeed unavoidable—that the boundaries of a school district should be measured by the legs of the children; that is, that the school should be within walking distance of all the pupils of the district.” Such a system “met the needs of the moment and served its day. But pioneering in Canada, except in some remote localities, is a thing of long ago. Time has marched on, but the little red school house remains. Co-operation among farmers for many purposes is now widely practised, but each sticks to his own little group in controlling the agency which performs the important task of developing the talents of his children.”

British Experiment Successful

And this also is not hard to understand. For that which is customary seems natural and right to us. What would puzzle a stranger unfamiliar with our history and our ways seems only the order of nature to us. We are told that England long ago abandoned a similar system as unsuited to modern needs and now has 313 school boards for a population of 40,000,000; that Scotland has changed from a plan which parcelled out the country into 947 school boards to one in which 35 now administer a system with a total enrollment of almost 1,000,000 students; that New Zealand has only nine school districts for the entire country and Australia only one for each state (corresponding to the province); and we are told that, even in Canada, several provinces have partially tried out the method of the larger school units and that Alberta has adopted it on a province-wide scale, only certain isolated districts being exempt. But when we hear these things, we are apt to reply: “That may be all right for them, but it won’t work here”, without first a consideration why it won’t work, or rather how it can be adapted to suit our conditions.

The main point is that we can no longer allow ourselves to be handicapped by any outworn system. We know that changing the system is not enough to give us the full results which we desire, but, that a bad system can frustrate all plans for improvement. All those interested in a better education for children and who are anxious to study the matter should secure the six Rural Life Series pamphlets specially designed for study groups, which may be obtained free on application to the Director of Protestant Education, Department of Education, Quebec.

We may well ponder the following wise words contained in a recent address by Dr. R. C. Wallace, Principal of Queen's University:

"But the little red schoolhouse is in difficulties. It raises its taxes in its own area, it is administered by its own local trustees, and its teacher is under local influence. People who are thinking seriously about education in all the provinces have been asking themselves for some time whether wider areas of taxation and administration would not be for the benefit of the teacher and the child. The poor areas would benefit to some extent by the ability to pay of more fortunate areas. The trustees would be more competent. The teacher would have a better chance. In some provinces progress has already been made and in others the idea is under serious consideration.

"I have emphasized the rural school, because it is even today the place where the foundations of education are laid for the significant part of our Canadian citizenship. There, too, the problems are greatest. On it is built the structure of high school and technical school, college and university, workers' educational movements and adult education enterprises."

BROME FORUMS MEET

Twelve Farm Forum Groups were represented at the regional conference for Brome County, held in Knowlton on February 20th. The conference was called under the joint auspices of the Brome Farm Forums with Claude Whitcher of Foster as Chairman; the County Department of Agriculture, with L. D. McClintock as agronomer and the Rural Adult Education Service.

Reports of farm Forums revealed that interest was keen. Most groups had resumed after the Christmas break. Some had met every week since the broadcasts began. The forums are making a definite contribution on the social side of community life as well as having an educational value.

Afternoon discussions centred around feed problems, co-operation, the egg bonus and health services. M. Bisson of the Canadian Livestock Co-operative, outlined the requirements and procedure for affiliation with the Co-operative Federée. A committee was appointed to investigate the possibility of improved health services and to call a public meeting to discuss the matter. The Canadian Federation of Agriculture found general favour but more information about it was requested. It was agreed to send delegates to the Farm Forum conference in June and to hold a conference for the district of Bedford in Knowlton on May 30.

BEAT THIS!

One Farm Forum secretary reports that a woman recently attended a Forum meeting with her husband — the first time the couple had been out together for 10 years!

Another secretary reports, "One of our members has belonged to the . . . Club for some time. In this district they meet on Monday nights and earlier this winter. This

member attended both the Club and the Forum. However, now that the Forum is earlier he has given up his membership in the Club in order not to miss the Forum meetings."

"INFORMATION PLEASE"

That the Farm Forum program is more than just an evening's entertainment is well illustrated by the growing number of inquiries for further information. During the past two weeks many requests have come to the provincial office for study outlines on co-operative organization and credit unions, as well as requests regarding buying clubs, car insurance, and recreation guides. Information on the new egg bonus has been sent to 125 groups; 300 copies of a good farm account book have been distributed and 250 mimeographed copies of the Co-operative Federée affiliation agreement.

COMING CONFERENCES

The County Conference at Knowlton illustrated the importance of regional meetings. These make planning on a larger scale possible and are a means of keeping the provincial office in touch with the progress of the movement. Accordingly plans are being made for rallies in Stanstead and Sherbrooke Counties, March 13; and Richmond, March 14. Then, up the Ottawa if plans mature, the meeting for Pontiac County will be on March 23, and in Argenteuil on March 24. The thirty-five Farm Forums in Chateauguay-Huntingdon area are also planning a spring get together but as yet a date or place has not been decided.

STILL MORE GROUPS

The total number of groups to date are 125. The average membership per group is 14. We welcome the last to register, at Aylwin, with Mr. Nobel Rusentrom as secretary. We are receiving on an average weekly reports from 72% of the groups. About 30% of them have supervised recreation. Mr. Lester Parnell, Lennoxville, has the largest registered group, but Mr. C. E. Dahm's forum of Huntingdon tops the list as far as weekly attendance goes with an average of 27 each evening. Mr. D. J. McEwen's group, Ormstown, is distinguished by the presence of Mrs. Robert Cairns, 91 years of age.

FILM NOTES

The average audience for the first 57 showings of National Film Board films was 115 and usually there were two meetings in each place — afternoon for children, evening for adults.

The two circuits were completed for the February showings with 20 towns in each. The films continue to be well received everywhere.

The secretary of one committee writes:

"The programme was a decided success in every way. Everyone enjoyed the evening and I am just afraid we may not be able to accommodate all the people the next time the pictures are shown."

Another says: "The films are splendid — head and shoulders above any other educational films that I recall."

PARENTS AND CHILDREN

by Mary Avison

CHILDREN AND MONEY

Money assumes such an important place among the various problems of family life that children should be trained in its care and use.

One conscientious mother says: "Yes, I give my eight-year-old regular pocket money. It is not very much but it is all that I feel we can afford." And then she admits: "I guess I do supervise how he spends it — but I am so afraid he will waste it!"

Another says: "Our daughter has a clothes allowance but of course we supplement it by giving her extra things we think she needs". A third: "No, our children don't have a regular amount each month; we tried that but they always squandered it all before the end and we had to help them out, so now we just give them money when they need it for things we think are legitimate."

Children do not learn the value of money by these methods nor how to handle it wisely. Money is a tool, which, like other tools, we learn to use by using. Children should have opportunity to discover how far it will go by having to do without when an allowance is spent — to learn what it will buy by making their own choices and having to abide by them — to recognize the relative value of cheap or expensive goods by testing them out.

They should come to realize that essentials are a first charge on their resources. This which they will not do if someone else provides them when the child's resources are exhausted. They should have the right to decide within the limits of their allowance, what is *essential* to them. To one it may be a Mickey Mouse pencil box or a book on birds, to another a new hair clip or the latest sweater fashion, to a third it may be candy to share with friends, or the feeling of righteousness that comes from giving to charity.

Here, often, is a clue for parents to an understanding of their children's unspoken hunger for companionship or admiration or excitement or assurance — but only if they are allowed sufficient freedom to "be themselves" in their spending.

As our children develop and reach their teens (sometimes earlier) they are bound to be interested in the bigger question of family spending. — "Why can't we have what so-and-so has?" "How much did this cost?" "What do we spend on that each month?" A past generation thought that only father should know the details of the family budget, and that he should dole out, even to mother, the amount he thought she should have. But budgeting can be shared by both parents, or by all the family, and is a valuable training for older children. Children who know what the fixed demands are, and how much is left over for extras, are less likely to be exorbitant in their requests for "what the neighbors have", and more ready to share in family economics that make possible family treats.

ON SAVING SUGAR

The sugar rationing may be a little inconvenient at first, but it can hardly be called a kitchen catastrophe. Three quarters of a pound per person per week is about 1½ cups, or a little over 10 level teaspoons a day. This is still quite a lot of sugar, but if it happens to be less than you have been used to, try some substitutes, and keep on the lookout for chances of avoiding waste.

One of the most obvious wastes is, of course, the undissolved sugar that is often found in the bottom of a cup of tea or coffee. We all have seen someone put two or three spoonfuls of sugar into a cup of coffee, then drink the coffee without bothering to stir it first. One teaspoonful or even less, well stirred, will give the same flavour. Other sugar wastes come from over-sweetened foods, cake failures, or failures of any product that uses sugar.

Keep on the lookout for other ways in which to save sugar. Do you really need all the sugar you use on your cereal in the morning, or do you put on two spoonfuls just from force of habit? Try using some dried fruit on your cereal — you'll need less sugar if you do this.

Try eating fewer rich desserts — fewer pastries and very sweet cakes. Fresh fruit is one of the best desserts — and it needs no sugar at all. A pudding made with raisins or dates needs less sugar for sweetening than a plain one. Supplement your diet and add variety by using some other sweet food instead of sugar — honey, cane syrup, molasses, maple syrup, and so on.

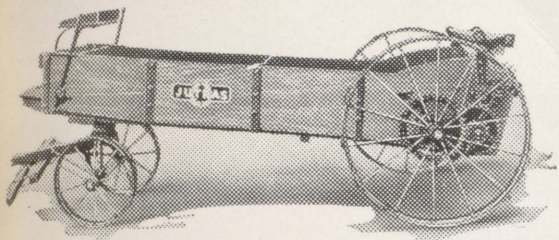
And in cooking, why not use honey instead of sugar? When honey is used merely to sweeten, it may be used instead of sugar, cup for cup, for it is about equal to sugar in sweetness. When honey is used in a cake or quickbread, however, some allowance has to be made in volume. If you substitute medium thick honey for all the sugar in a cake or quickbread reduce the liquid in the recipe by half. If you substitute medium thick honey for half the sugar reduce the liquid by one quarter. Bake all such cakes at a moderate temperature to prevent too rapid browning and to keep the good honey flavour.

Corn syrup is half as sweet as sugar, and can be used as the only sweetening in many ways. When it is used in beverages, puddings, custards, and sauces in the place of sugar the other liquids must be reduced by one quarter. Corn syrup can be substituted, measure for measure, for the sugar specified in standard recipes for muffins, plain cakes and drop cookies, and the other liquid reduced one third.

There are many other devices which will doubtless suggest themselves to you. We can all get along on a lot less sugar than we have been using and still have nutritious meals that taste good. The only thing we have to do is to learn how to prepare them.



The "Jutras" ULTRA-LIGHT Manure Spreader



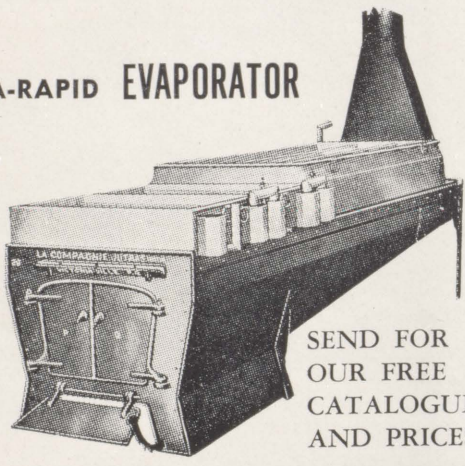
NEW MODEL
with
"LINCOLN"
GREASING
SYSTEM

More Jutras manure spreaders are used in Canada than all other makes combined: thousands of farmers are using them. This machine, on the market for over 40 consecutive years, is ideal for Canadian farmers. Its wooden box resists the acids in manure. Its forged wheels last longer. The cold rolled axles are more durable. The mechanism is easy to put into gear and traction is light. The weight is well balanced and the wheels do not sink into the ground. It is easily loaded and spreads evenly and economically. It is the lightest of all, and the easiest on horses. Perfect lubrication is assured with the new Lincoln pressure greasing system.

THE JUTRAS ULTRA-RAPID EVAPORATOR

Install the most highly perfected machine, the one which evaporates sap fastest, which saves fuel, and requires the smallest investment. "14 sizes to choose from, 25-265 gallons per hour".

A complete line of sugar-making equipment. We use only special No. 22 Double-Coated English tinned sheets, and our pails are soldered with pure tin, which is free from lead, and is approved by the authorities.



SEND FOR
OUR FREE
CATALOGUE
AND PRICES.

JUTRAS COMPANY LIMITED
VICTORIAVILLE, QUEBEC



Extra Growth Value Because it's FRESH

You can be sure of the freshness of PIONEER Dated CHICK MASH STARTER, which means extra growth value in every bag. Start your chicks right with PIONEER, the Profit-proven way to chick raising success. Make this year a PIONEER sure-profit year. Ask your local PIONEER dealer for FREE booklet entitled "Give Me Pioneer."

PIONEER *Profit Proven* FEEDS

Western Canada Flour Mills Company Limited

STILL CLIMBING

Well, Son I'll tell you:
Life for me ain't been no crystal stair.
It's had tacks in it,
And Splinters,
And boards torn up.
And places with no carpet on the floor.
Bare.
But all the time
I've been a-climbin' on,
And reachin' landin's
And turnin' corners
And sometimes goin' in the dark
Where there ain't been no light.
So you, don't you turn back.
Don't you set down on the steps
'Cause you find it's kinder hard.
Don't you fall now —
For I've still goin', Honey,
I've still climbin'
And life for me ain't been no crystal stair.

—Langston Hughes.

SUBSCRIPTION FORM

Please send the Macdonald College Journal for two years to

Name.....
Print name and address clearly

Address.....

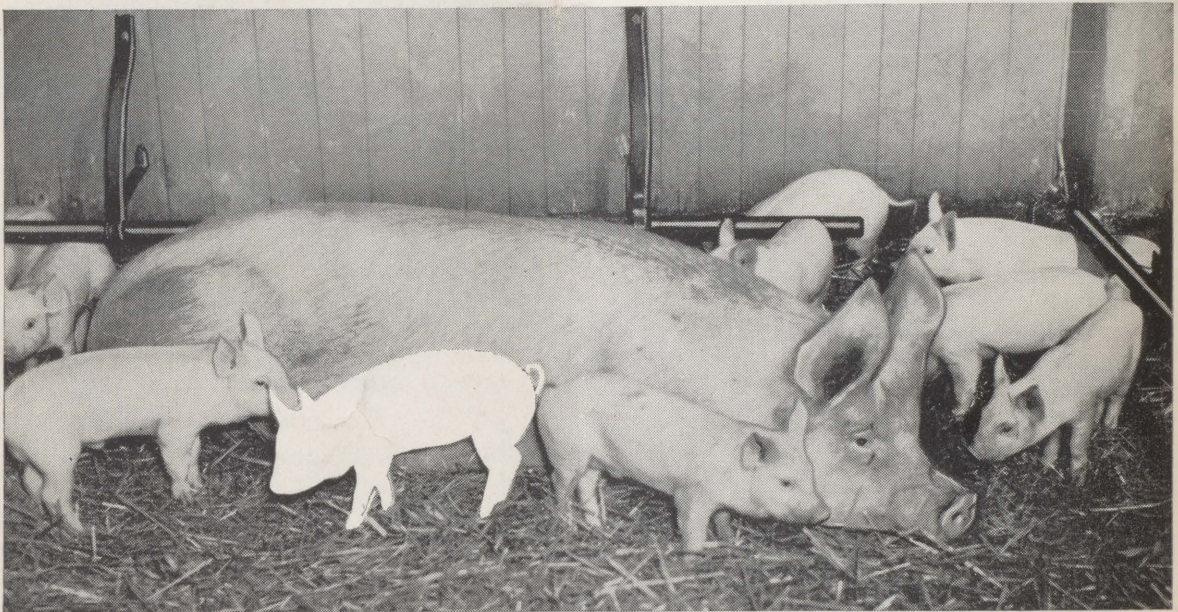
The Subscription Fee of \$1.00 for 2 years is enclosed.
(The price for a 1 year subscription is 50c)

FILL OUT THIS FORM AND MAIL IT WITH YOUR SUBSCRIPTION TO:

THE MACDONALD COLLEGE JOURNAL
MACDONALD COLLEGE, QUEBEC



TWO WILTSHIRES MISSING FOR EACH PIG LOST



EVERY PIG IS NEEDED. MANY CAN BE SAVED BY PRECAUTION AND CARE DURING THE CRITICAL FARROWING AND NURSING PERIODS.

- *Farrowing pens* should be warm and dry, and equipped with guard rails.
- *Attention* during farrowing and the use of artificial heat if necessary may save a pig or an entire litter.
- *Parasites* can be prevented by proper sanitation of pens and yards.
- *Anaemia* can be prevented by giving the pigs iron in some form. This should be started shortly after birth.
- *Proper feeding* of the sow reduces digestive disorders and induces normal development of the pigs.
- *Creep feeding* produces thriftier pigs and reduces the shock of weaning.

EVERY PIG SAVED AND RAISED TO 200 POUNDS MEANS AN ADDITIONAL 115 POUNDS OF BACON FOR BRITAIN AND MORE ECONOMICAL PRODUCTION.

For further information consult your Provincial Department of Agriculture, Agricultural College, or nearest Dominion Experimental Farm, or Live Stock Office of the Dominion Department of Agriculture.

AGRICULTURAL SUPPLIES BOARD
Dominion Department of Agriculture, Ottawa
Honourable James G. Gardiner, Minister